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ABSTRACT

The purposes of this guidebook for secondary typewriting teachers are to provide information about common typewriting problems, to suggest alternative teaching strategies, and to explore new areas of concern. Contents include suggested performance objectives for the first and second year of typewriting instruction at the secondary level; procedures for implementing competency based instruction; and information on a variety of teaching strategies for both individualized and group instruction. Chapter topics are as follows: (1) The Role of Typewriting (Dual Role, Objectives, Articulation); (2) Developing Typewriting Skill (Keyboard, Manipulative Parts, Techniques, Developing Speed and Control); (3) Problem and Production Typewriting (Definitions, Comparison of Rates, Building Speed, Typing Tasks, Grading); (4) Competency-Based Instruction (V-TECS, Planning, Guiding Instruction, Evaluating, Grading); (5) Individualizing Typewriting Instruction (Implementing Individualization, Basic Concepts, Learning Environments, Strategies); (6) Trends (Word Processing, Metrication, Simulation); (7) Mainstreaming (Implications, Techniques); (8) Facilities and Teaching Materials (General Facilities, Equipment, Supplies, Instructional Aids, Check List); (9) Typewriting I Research Study (Competencies, Performance Objectives, Learning Guides, Sample, Findings, Conclusions and Recommendations); and (10) Typewriting I Evaluation Instruments. Included is a summary of the project which developed the guidebook. (JH)

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JUN 26 1978

TYPEWRITING for BUSINESS EDUCATION DEPARTMENTS in PENNSYLVANIA'S PUBLIC SCHOOLS

JUN 28

Bulletin 275 Revised

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Bureau of Vocational Education
Pennsylvania Department of Education
1978

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
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PREFACE

Bulletin 275 Revised has been written in response to the need for an updated version of the 1962 bulletin, Typewriting for Business Education Departments in Pennsylvania's Public Schools. It reflects current literature and significant contributions of research pertaining to typewriting instruction.

The bulletin applies the concept of competency-based instruction to the teaching of typewriting. It deals with current issues such as individualizing instruction and mainstreaming exceptional children in the typewriting classroom.

Alternative teaching strategies are presented so that typewriting teachers may choose those which fit their situation.

The bulletin has been revised with the guidance and counsel of Dr. William Selden, Senior Program Specialist, Department of Business Education of the Commonwealth of Pennsylvania.

ACKNOWLEDGMENTS

Appreciation is expressed to the following persons who suggested topics to be included in the Bulletin. Special thanks are due to North Hills High School, Pittsburgh, and to Lower Dauphin Senior High School, Hummelstown, for providing photographs.

Evelyn M. Armstrong, chairperson, Business Education Department, North Hills High School, Pittsburgh.

Mary Jean Cignetti, business education teacher, Oliver High School, Pittsburgh.

Mrs. Dolores Frankhouser, chairperson, Business Education Department, Millersville High School, Millersville.

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PA93-8002: Bulletin 275 Revised: Typewriting for Business Education Departments in Pennsylvania's Public Schools

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$10,050 Grant
10/1/77 to 6/30/78

The purpose of the project was to revise Bulletin 275, Typewriting for Business Education Departments in Pennsylvania's Public Schools (originally published in 1962) to help typewriting teachers improve their instruction.

Objectives

1. To review psychological principles upon which typewriting skill is built.

2. To summarize significant research contributions to the teaching of typewriting.

3. To suggest competencies to be obtained by typewriting students in Pennsylvania.

4. To present alternative strategies for developing typewriting competencies.

5. To suggest techniques for mainstreaming exceptional children into the typewriting program.

6. To survey physical facilities and teaching materials available for typewriting instruction.

7. To explore current trends in the teaching of typewriting.

Outcomes

The revised bulletin includes:

1. Suggested performance objectives for the first and second year of typewriting instruction at the secondary level.

2. Procedures for implementing competency-based instruction in typewriting.

3. Information on a variety of teaching strategies for both individualized and group instruction in typewriting.

Audience

This revised bulletin will be used by typewriting instructors at the secondary level in Pennsylvania.

Publications and Available Materials

Bulletin 275 Revised will be published by the Pennsylvania Department of Education.

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METHODS

Procedures used in the preparation of the revised bulletin included:

1. Reviewing current methods books, teachers' manuals for typewriting textbooks, research studies, and articles by typewriting authorities in business education publications.

2. Comparing competency statements published by other states with suggested competencies for typewriting students in Pennsyvania.

3. Securing by mail suggestions from selected high school teachers on content needed in a revised typewriting bulletin.

4. Writing a ten-chapter booklet which includes a series of tests which may be given at the conclusion of a first-year typewriting course and a summary of achievement of typewriting students in selected high schools of Pennsylvania on these tests.

5. Submitting the chapters for review by the Business Education staff of the Pennsylvania Department of Education.

6. Taking photographs of typewriting facilities to illustrate bulletin.

OUTCOMES

The manuscript for Bulletin 275 Revised, Typewriting for Business Education Departments in Pennsylvania's Public Schools is included in this report.

DISSEMINATION

After the Department of Education has reviewed the manuscript, it will be published and distributed to all Pennsylvania high schools by the Business Education section of the Department of Education.

TYPEWRITING for
BUSINESS EDUCATION DEPARTMENTS in
PENNSYLVANIA'S PUBLIC SCHOOLS

Bulletin 275 Revised

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Mary Jane Strite, chairperson, Business Education Department, Lower Dauphin Senior High School, Hummelstown.

SUGGESTED PREFACE FOR BULLETIN 275 REVISED:

The purpose of this bulletin is to provide current information about common typewriting problems, to suggest alternative teaching strategies and to explore new areas of concern to typewriting teachers.

To determine the bulletin's content, the authors asked high school teachers to define problem areas and to suggest topics on which they would like more information.

Research studies and the recommendations of experts provide the background for the bulletin material.

The advice and counsel of Dr. William Selden, Senior Program Specialist for Business Education,and a grant from the Department of Vocational Education made the preparation of the Bulletin possible.

CHAPTER ONE

THE ROLE OF TYPEWRITING

> The predominant typewriting program in the schools surveyed (during the 1974-75 school year) was four semesters in length...
>
> --Jerry W. Robinson

Typewriting is the most extensively offered business education course in high schools today. "In the United States, a high school graduate who has not had some typewriting instruction is indeed a rarity."[1]

Dual Objectives

Much of the popularity of typewriting stems from its dual role--equipping students with a vocational skill that will help them obtain employment in an office and providing for their personal use a communication tool that is both more rapid and more legible than handwriting.

Vocational Skill

When the typewriter was invented more than a century ago, the means was provided for women to enter the field of office work which had previously been dominated by men. Today, the ability to typewrite is a basic component of most entry-level office jobs. According to current census data, approximately three million office workers use the typewriter significantly in their job settings.

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[1] John L. Rowe, "Typewriting in the 70's--an Overview, "Effective Secretarial Education, 1974 National Business Education Association Yearbook, p. 58.

New dimensions have been added to vocational courses in typewriting offered at the secondary and post-secondary levels. Today's word processing equipment requires fast and accurate keyboarding skills as well as proofreading and formatting skills to operate automatic and text-editing typewriters. The computer has created an additional need for typewriting instruction, since typing skill is transferable to many input devices, such as key punch or key-to-tape equipment.

Communication Tool

Some students who enroll in typewriting take the course for its non-vocational value. Students use typewriting for classroom activities, such as class notes, themes, and research papers; for co-curricular activities, such as minutes of a meeting of a Future Business Leaders of America chapter or copy for the school newspaper; and for job-seeking activities, such as application letters and resumes. Writers, reporters, pharmacists, computer programmers, investigators, salespersons and teachers often use typewriting in their job-related activities; many other persons type tax reports, insurance forms, recipes, book reviews and personal business letters. All of these people can benefit from a reasonably fast and accurate typing skill.

Objectives

Recently the movement to competency-based education has been making teaching and learning in the typewriting classroom more relevant and more flexible. In competency-based courses objectives are specific and available to students as well as to teachers.

In a traditional program, the following objectives should be achieved by students earning a C grade at the end of one year of typewriting instruction. In a competency-based program, students may take less or more time to meet these objectives. (Faced with an unusual situation, a teacher may wish to modify these objectives to satisfy specific local needs.)

Typewriting I

Students may be regarded as having achieved a basic typewriting skill when they

1. type copy containing the alphabet, numbers and basic symbols using correct techniques.
2. type unpracticed straight-copy material of average difficulty for five minutes at a rate of at least 35 words a minute with no more than 5 errors.
3. type business and personal letters in correct form with a carbon copy, proofread the copy and correct any errors.
4. type envelopes for personal and business letters in correct form and proofread and correct any errors.
5. fold typed letters properly for insertion into a small and a large envelope.
6. compose a rough draft of a personal letter at the typewriter, then type the letter in correct form.
7. type a two-page unbound manuscript in acceptable form, proofread and correct any errors.
8. type a title page, table of contents and bibliography in correct form.
9. type a three-column table with a major and a secondary heading, after determining the correct placement of headings and columns.

10. care for the machine, change the ribbon and use all machine parts efficiently.
11. demonstrate knowledge of English usage and typewriting rules as covered in the textbook used for class work.
12. demonstrate work habits and attitudes that are important to success in personal activities and that are acceptable in an office situation.

Typewriting II

Typewriting students should be regarded as having achieved an advanced vocational skill when they

1. type unpracticed conventional straight-copy material at 50 words a minute for five minutes with no more than 5 errors.
2. type under time pressure a one- or two-page business letter with a carbon copy in any designated letter style and proofread and correct any errors.
3. type from rough-draft copy letters, memorandums, and manuscripts and proofread and correct any errors.
4. demonstrate sustained production skill on letters, tables, manuscripts, memorandums and commonly used business forms.
5. address a business envelope every two minutes in acceptable form.
6. demonstrate office typing skills through participation in simulated office experiences or in part-time office positions.
7. work independently or follow instructions that are given.

Non-Vocational Typewriting

Students enrolled in a one-semester non-vocational course in typewriting should gain enough copy skill to be able to concentrate on the content and format of the material being typed without being concerned with the manipulative aspects of typing. At the end of a one-semester nonvocational course, students should

1. type with good technique the alphabet, figures and commonly used symbols.
2. type at 25 words a minute with no more than 3 errors on a three-minute unpracticed straight-copy timed writing.
3. compose rough drafts of personal letters at the typewriter and then type them in acceptable form.
4. type usable copies of one style of business letter with a carbon copy and an appropriate envelope.
5. type short school assignments from handwritten or rough-draft copy.
6. proofread and make acceptable corrections on typed copy.
7. clean the typewriter and change the ribbon.

Articulation

One of the main problems that typewriting teachers face is taking care of individual differences that exist among students scheduled for the same typewriting course.

Students with Prior Training

Students entering Typewriting I have different skills, for some have taken a summer course or an elementary school course in typewriting. At the beginning of each typewriting course, it would be wise to give a placement test and then vary the instruction appropriately. Placement tests are available from publishers of typewriting textbooks.

Adult Students

Typewriting courses are attracting large numbers of adults whose needs and characteristics differ from those of high school students. Many adults enrolled in typewriting classes have a full-time job as a homemaker or an office worker. Their time is limited, their attendance is voluntary and they will continue with the course only if their needs and goals are being met. Since many adult courses meet for only two hours a week, it will be easier for the students to meet their goals if they have a typewriter available for daily practice.

For adults who have had some previous typewriting instruction, the course in which they are enrolled should build on the skills they already possess and provide a supportive environment in which to learn.

CHAPTER TWO

DEVELOPING TYPEWRITING SKILL

> There is a difference between purposeful practice at an assigned level of speed and practice which is a complete waste of time.
>
> -Lawrence W. Erickson

The aim of typewriting instruction is to enable students to become so proficient at typewriting that they will want to use the typewriter in daily life in either vocational or non-vocational pursuits. Each student, therefore, should experience success.

Typewriting is a hierarchic skill. The base of that skill is a knowledge of the keyboard and the ability to handle the manipulative parts of the typewriter efficiently and strike the keys with correct technique. Having mastered these essentials, the student is ready to build speed and control.

Keyboard

The time used to cover the keyboard varies from three to six weeks. How long a teacher should spend on keyboard presentation depends on how easily the students are performing as they operate the typewriter. Students need time to develop self-confidence and stroking skill. Some textbooks provide a reinforcement lesson after each lesson in which new keys are presented. Other textbooks wait until the alphabet and the major punctuation marks are introduced and then devote several lessons to building stroking skill. The keyboard row that is most difficult for students to master is the figure and symbol row. Since the reach to figures is longer, practice will not make the typing of figures and symbols as easy as alphabet typing. Figures are used frequently (social security numbers, credit card numbers, etc.) and the ability to type figures accurately is important. After the introduction of the figures, therefore, some practice on them in each lesson is desirable. Students should be asked to type their name and the date expressed in numbers on each paper they place in the machine. Example: Pat Smith, 11-27-1982. Demonstration by the teacher while dictating the numbers 1 to 20 often motivates students. Recommended drills in which numbers are related to letter keys are effective. Example: we 23; it 85; to 59; up 70; or 94; ow 92. Other teachers recommend typing the word and after each figure (2 and 3 and 4 and 5) to bring the fingers back to the home position. Only frequently used symbols should be given extensive practice. Copy combining figures and symbols should be delayed until the figures are mastered.

Manipulative Parts

Machine parts should be presented as needed. The line space regulator, the margins and the paper guide should be set on each typewriter before a beginning class meets for the first time. There are several machine parts that need to be explained in the first or second session, since they must be understood before much typewriting can be done. These parts are the cylinder knobs, paper release, paper bail rolls, paper table, carriage or carrier return and space bar.

The space bar is used frequently. The tendency of beginners is to straighten the fingers of the hand and let them fly off the keys as the thumb operates the space bar. Students should be instructed to keep the thumb close to the space bar. Quick stroking and release of the space bar with a minimum of thumb movement should be stressed. The space bar stroke should come immediately after the last letter of the word is struck.

Techniques

During the first weeks of learning, emphasis should be on correct techniques. The hand should not slope to the outside; the wrist should not rest on the frame of the typewriter. The correct key stroke is a quick stroke to the center of the key. The fingers should be curved, and the contact with the key made with the tip of the finger. Long fingernails are a definite handicap. Students must acquire a sense of distance and direction. They should, therefore, look at the keyboard when each new letter, number or symbol is introduced. Once students have learned the location of each key, looking at the keyboard should not become a habit. Habitually looking back and forth from the copy to the machine inhibits progress, and students should be made aware of this.

Make keeping eyes on the copy a game. Divide the class into competing teams. The team wins whose members all type for one minute without looking at the keyboard. Proper techniques must be taught, practiced, evaluated and retaught until they become habitual.

Developing Speed and Control

Skill development should proceed from correct technique, through speed, to control. As students develop speed, a continued emphasis on correct technique is important. Merely telling a student to slow down or to type faster will not bring the desired result. Indeed, an all-out drive for speed (type as fast as your fingers will go) will result in jerky typing and tense students. Students, however, will gain better control if they realize that all words cannot be typed with the same rhythm. Short words may be typed as a unit (is, his; or, for; an, and); word endings (tion, sion, ing) and word beginnings (pro, pre and con) often can be typed as a unit; but long words or words with difficult reaches often must be typed letter-by-letter. Drives for speed and accuracy should alternate.

Goal Setting

If speed is the goal, the student should increase his or her rate by two-word intervals until typing five or six words a minute more than the best previous rate. A drive for speed will result in additional errors which should be ignored until the goal is achieved.

If accuracy is the goal, the student should drop back two or three words a minute until control has been achieved.

Only practice with a purpose is effective. If it is necessary for the teacher to have time at the beginning of a class to accomplish administrative tasks, students should practice drills which emphasize a special feature, such as the shift or numbers. The teacher should explain the purpose of the drill and also indicate the technique to be stressed that day. Example: fingers curved, eyes on copy.

Students should keep a record of progress by posting their timed writings on one- and five-minute charts. Students may be asked to type at the top of practice papers:

Best timing yesterday	___ WAM		___errors
Emphasis this week	(speed)		(accuracy)
Goal	___ WAM	or	___errors

Individualized Guided Drills

Guided drills help students pace their typing. These drills enable students to find the rate at which they can produce usable copy. Guided drills can be used to secure either speed or control. No matter how students are organized--in a large group, in small groups or in independent progress or individually prescribed patterns--they can use guided drills to set and achieve individualized goals.

Sentence Guided Writings. The copy for sentence guided writings is arranged vertically. Many sentences are included in the drill, and each sentence is slightly longer than the previous one. A signal is given each 20, 15 or 10 seconds, depending on the student's goals. When increased speed is the goal, each student tries to complete a sentence at the exact second the signal occurs. When successful in completing a sentence as guided for a minute, the student proceeds to the next slightly longer sentence. One set of drill sentences may accommodate students whose speeds vary from approximately 15 to 35 words a minute, given a 20-second signal; or from 40 to 100 words a minute, given a 10-second signal. When control is the goal, students proceed from one sentence to the next when they can follow the signal and type with no more than one error for one minute.

Paragraph Guided Writings. The copy is marked in two- or five-word intervals. The student types from the copy for one minute to establish a basic rate. Then if the drill is used for developing speed, that rate is increased by one interval; and the number above the rate is noted. Since the guide will be given each 15 seconds, that number is divided by 4; and the student notes the place on the copy where he or she wants to be at 15, 30, 45 and 60 seconds. If the drill is being used to gain control, the student establishes the basic rate and then decreases the rate by one interval endeavoring to type as guided with no more than one error a minute.

Progressive Paragraphs. The copy contains a number of paragraphs of 30, 35, 40, 45 and 50 words in length. The student selects the paragraph containing the number of words equal to his or her base rate. If a student is typing from 60 to 100 words a minute, he or she endeavors to type the paragraph twice in the minute. When the student types for one minute with no more than one error, he or she proceeds to the next longer paragraph.

Variable-line Drills. These drills can be used with any copy. Machines are set for a 50-space line; a signal is given each 30 seconds. When the student completes the line accurately in one-half minute, the typing rate is 20 words a minute. The student then moves to a 60-space line (24 words a minute) and to a 70-space line (28 words a minute). For students typing at higher speeds, the signal can be given each 20, 15 or 10 seconds.

Scribble Writing. Scribble writing is a way to help students reach new speed goals. With machines set for a 50-space line, the student takes several one-minute writings in succession. Each line is typed over the previous one. With each writing, the student tries to type a few words beyond the previous writing. These individualized guided drills help students type with speed and control.

An entire period should not be spent in practice of this type. Nor should an entire period be spent in taking five-minute timed writings. The law of diminishing returns makes such continued practice unrewarding.

Grading Straight Copy

During at least the first grading period, only technique and keystroking speed should be emphasized. Later, most teachers measure speed and accuracy separately. Some teachers use an absolute scale for measuring accuracy and permit a specified number of errors for each letter grade. Other teachers prefer a percent of error scale and permit the students a greater number of errors as their speed increases.

During the first year when the speed and accuracy grades are averaged, the speed grade is given the greater weight, for it is a more reliable score. Later speed and accuracy grades are often weighted equally.

The Pennsylvania Civil Service Typing Test consists of approximately 21 lines of straight copy totaling 250 words. Applicants must meet the following standards.

2/8

STANDARDS FOR CIVIL SERVICE TYPEWRITING TEST

Words Typed Per Minute (For at Least 5 minutes)	Clerk Typing I Clerk Stenographer I	Clerk Typing II Clerk Stenographer II
	Maximum Number of Errors Permitted on a 5-Minute Test*	
Fewer than 40	- - - - - Ineligible on Speed- - - - - - - -	
40	3	3
41-42	4	4
43-44	5	4
45-49	6	5
50-54	7	6
55-59	8	7
60-64	9	8
65-68	10	9
69-73	11	10
74-78	12	11
79 and above	12	12

*An error is any deviation from copy. Only one error is chargeable per five-stroke word.

Requirements concerning educational qualifications and work experience are published in a bulletin that can be secured from the Civil Service office in the area.

CHAPTER THREE

PROBLEM AND PRODUCTION TYPEWRITING

> Typewriting courses designed to develop production ability should include instruction purposely directed toward improving behavior in the nontyping as well as key-stroking phases of production typewriting.
>
> -Thomas James Crawford

The achievement of straight-copy speed and control is an enroute goal. Office employees do not take timed writings; however, they do produce usable letters, tables, manuscripts and office forms in a reasonable length of time. The true test of a good typist, therefore, is the ability to apply typing skill to the production of office or personal tasks.

When students can type with reasonable control at 25 to 30 words a minute, they should begin to type letters, simple manuscripts and tables. Thereafter, the amount of time spent on typing jobs which are compatible with those of employed typists should increase steadily.

Definitions

Problem typing refers to the typing of material that is similar to office tasks--reports, letters, tables and forms. Production typing refers to the typing of a variety of problems within a given period of time, making an effort to obtain maximum output. Production typing rate includes non-typing activities, such as reading, interpreting and following directions, adjusting the typewriter, proofreading and making needed corrections. Both quality and quantity are essential criteria. Studies have shown that non-typing activities consume from one-fifth to one-half of the total time spent in production typing.

Comparison of Rates

There are considerable differences between the rate at which a typist can produce straight-copy material and the production rate for letters, tables, rough drafts and other office tasks. Intelligence is not an important factor in keystroking, but it is very important in making the decisions required to type production tasks accurately and quickly.

The rate differences result from

1. the ability of the student to make decisions concerning English usage and arrangement.
2. the difficulty of the task.
3. the student's skillfulness in making carbons, proofreading, erasing, handling supplies and using the manipulative parts of the typewriter.
4. the fact that production tasks are often graded on a mailable basis; one uncorrectable error means that the entire problem must be retyped. Students, therefore, are apt to become exclusively concerned with accuracy, with a resultant drop in production rate.

Building Speed

Many of the principles used to build speed and accuracy on straight copy are equally helpful in building problem and production skills.

Readiness

A student must have the prerequisite skill needed in the new task. Convinced that the ability to perform the new task will prove useful, he or she will approach the new learning with zest.

Guidance

Guidance makes learning to type office tasks easier. The use of the overhead projector and transparencies during the first lessons devoted to typing a particular office task helps avoid uncertainty on the part of students. When a transparency is used, each student can see the copy to be typed. On the transparency, the teacher can point out problem areas and mark directions about margins, indentations and spacing. Students can have their questions answered as the teacher points to the area of concern. After the presentation, the teacher should circulate about the room helping individual students rather than sit behind the desk marking papers.

Decision-making

While guidance is necessary when a student begins problem typing, students must learn to type problems without assistance. Each student must learn to follow directions, to verify content and to evaluate the finished job.

Reinforcement

Immediate reinforcement can be achieved by a model version of the task displayed on the bulletin board or screen, or duplicated and given to each student as soon as the task is finished. Such a model pinpoints student errors or verifies accuracy and thus gives the student immediate feedback. Immediate feedback also can be achieved by teacher comments,such as "Good," "Fine," "You did that exactly right!"

Timings

Timings are important! Unless the teacher forces the rate, the student will be so accuracy conscious that little will be produced. Timings must include the production of the entire task, not just the typing.

Typing Tasks

For all types of problem and production typing, more time should be spent in teaching than in testing. Typing problems , in order to be similar to office tasks, should include typing from handwritten copy or typed copy with handwritten corrections, composing at the machine and typing from dictation. The work produced during the learning period may be self-evaluated, evaluated by classmates and/or informally evaluated by the teacher while moving about the classroom. Problems should be separated into their essentials, and difficult sections should be used for drill and then combined and typed as a whole.

Letters and Envelopes

The following procedures are useful in developing speed when typing letters. Students should first type the entire letter as a pretest. Then, using the word count provided in the text, they should record their speed and accuracy scores. Next, one-half or one-minute timings should be given on the date, inside address and salutation and on the closing lines. The students then type the entire letter under time. Finally, the letter should be typed as a post-test, and the rate compared with the pretest rate. Thus, students learn how quickly a letter can be produced. The final timing on letters should be for 30 minutes, and the student should be penalized for each uncorrected error.

When students first begin to use carbon paper, the teacher should demonstrate how to assemble a carbon pack. As soon as the students assemble and insert the pack into the typewriter correctly, timing should begin. At a signal, the students should assemble the carbon pack, insert it into the machine and type as much of the letter as possible before time is called. During successive timings the student should strive to increase the number of words typed.

Before instruction on letter production is completed, students should address envelopes, fold letters, proofread and correct errors. Students should address envelopes according to specific directions at first. Later they should use judgment placement for the envelope address.

Tables

Students should type simplified tables before trying complex ones. Only one new feature of a table should be presented at a time. Similarities between the table at hand and tables previously typed should be pointed out. Beginning students should learn to center horizontally by the back-space method. Both methods of centering vertically, the mathematical and "roll back from the center" method should be taught. Students should then be permitted to choose the method they prefer.

Manuscripts

Students should learn the essential rules for word division and the typing of numbers. They should not be given, however, a rule for every contingency. Instead, they should become accustomed to using the dictionary or a handbook to solve unusual problems.

In manuscripts, references often are identified at the appropriate place in the body of the manuscript by enclosing in parentheses the author's surname, title of publication and the page.

A reader interested in the source can consult the bibliography.

Composing at the Machine

Students should be able not only to produce mailable work from copy handed to them in print, in script or in rough-draft form but they should also be able to take basic facts and compose a letter at the machine. In other words, typing should be a writing not merely a copying skill. Again, this ability is developed in stages. Students may proceed from typing a one-word answer to a question, to writing a short paragraph, to writing a friendly letter or replying to a business letter which a student or the teacher has received.

Wenger has suggested thirteen "thinking" projects which require students to compose at the typewriter. These projects give students an opportunity to express their opinions and attitudes toward occupationally related topics. A sample project follows:

> You are to make a study of the common forms of business letters and the strengths and weaknesses of each form. Based upon your findings, you will be asked to compose a statement indicating the form you believe should be used and the reasons supporting your conclusions.[1]

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[1] Fred Wenger, "Typewriting Composition Projects with an Occupational Thrust," Business Education Forum, April 1975, p 6.

Proofreading

Proofreading is an essential part of the typist's role; yet, proofreading is a difficult skill to teach. A research study[2] has revealed that students do not increase in proofreading ability as the instruction level increases.

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[2] Patsy Foust, Analysis of Activities in Production Typewriting and Standards, Ph.D. North Texas, Denton, Texas, 1975.

Part of the difficulty may lie in the fact that students are often penalized for each circled error. The student may reason, "If the teacher is going to exact a penalty, let the teacher find the error." To circumvent this response, some teachers give bonus points for papers accurately proofread. Other teachers circulate around the class and initial only mailable letters as they are completed. Following this procedure emphasizes the fact that proofreading is the student's not the teacher's responsibility. Three methods teachers may use to help student build proofreading skill are:

1. Paper-bail method Turn the cylinder until the paper-bail is just below the first line of writing and read that line for accuracy in meaning and typing. Check each line of the copy in this way before removing the paper from the machine. Figures, dates and names require special attention.
2. Cooperative method The copy should be read aloud to another person who checks for errors. Difficult words and proper names should be spelled.
3. Exercise method Use proofreading exercises that contain typing, English, spelling and punctuation errors and stage a contest to determine the best proofreaders.

Correcting Errors

Making an undetectable correction requires practice. Students must have typing paper on which it is possible to make a neat correction.

Students should have the opportunity to experiment with each technique suggested below. Then they should select the method they prefer and use it consistently.

Using Correction Tape or Strips. Backspace to the incorrect letter. Put tape, coated side down, over the error and retype the error. Then remove the tape, backspace and type the correction once or twice.

Using Correcting Typewriter. Some electric typewriters are equipped with a correction key and require a correctable film ribbon and a roll of lift-off tape. The typist hits the correction key which backspaces to the error. Retyping the error lifts the character from the typewritten page. Then the typist strikes the correct letter.

Using Lift-off Tabs. Some electric typewriters that do not have a correction key may be equipped with correctable ribbon and lift-off tabs. The typist uses the procedures indicated for using correction tape.

Using an Eraser. Move the carriage to the extreme side so that eraser crumbs do not fall into the type basket (not necessary with single element typewriters). If the error is near the top or bottom of the page, roll the paper up or down before erasing and thus prevent the paper from slipping. Erase lightly, first with a soft eraser and then, if necessary, with a coarse eraser, until the error is removed. Then brush away the crumbs. Position the paper and type the correction lightly. Rub a piece of white chalk on the back of the page at the erasure point. The white from the chalk will be absorbed by the paper, and the erasure will be unnoticeable.

Using Correction Fluid. Be sure the fluid is thin enough not to leave a blob on the paper. Remove excess fluid from the brush by wiping it against the side of the bottle. Dab enough fluid on the error with the tip of the brush to cover only the mistake. Allow the fluid to dry before typing the correction. Various colors of fluid are available. This method is especially good for copies which will be photographed.

Grading

Even though in recent years research on problem and production typing has increased, there are still no widely accepted standards for grading. Authorities agree, however, that a grade in typewriting should be based solely on typewriting performance. Reports on attendance and personality traits, while important, should be recorded separately.

The grading plan for production work should emphasize both quality and quantity. Producing quality work is of primary importance. However, a typist who produces a mailable letter in ten minutes has achieved better skill than a student who takes twenty minutes to complete the same letter. A grading plan for problem and production work should emphasize both quality and quantity.

Tests on one specific kind of typing job--letters, manuscripts, etc.--may be given at the end of each unit emphasizing that kind of job. Students should keep a record of their progress. Production tests which measure the students' ability on a variety of typing jobs should be administered near the completion of the course and require more than one testing period.

There are no employment related standards for specific typing jobs. Many companies today give only a straight-copy test to applicants for typing jobs. Such test scores have little relationship to the ability to produce office copy.

Grading Methods

Several ways of grading problem and production tests that are now being used follow. Each has certain disadvantages.

Errors per Job. Usually two points for each error are subtracted from the total number of points allotted to the job. This plan evaluates only quality of work produced. Quantity also should be evaluated.

Work Score. Under this plan, everyone is given the same amount of time and evaluation is based on the amount of acceptable work produced during that time. This seems to be an acceptable way of grading repetitive tasks; for example, given a list of three-line addresses, a student could be graded on the number of acceptable envelopes completed. Students should know the kinds of errors that would make an envelope unacceptable before tests are admitted. For tests which include tasks of various difficulty, however, this method of grading would not reflect student achievement.

Time Scores. Under this plan, everyone finishes the same amount of work; and the time taken to complete that work is recorded. A separate grade is given for speed and for quality. This plan distracts slower students. When slower students see others finishing, they are apt to become concerned and make many errors. Spending time to correct these errors affects their production rate adversely.

Percentage of Straight Copy Speed. Suggested standards are:[1]

Letters with carbons and envelopes	1/2 to 2/3 of basic typing rate
Envelopes	50% of basic typing rate
Rough drafts	40 to 60% of basic typing rate
Manuscripts	60 to 75% of basic typing rate
Tabulations	25 to 50% of basic typing rate

As the authors pointed out, the percentage of the base rate that a typist would be able to achieve would depend on the difficulty of the material to be typed.

Recommended Research

It is recommended that performance objectives which teachers, typewriting authorities and employers agree students should be able to demonstrate when they exit from a Typewriting II course be developed and validated. Then a series of tests to measure each of these objectives should be constructed and administered to an adequate sampling of Typewriting II students in Pennsylvania. The recorded results should help in developing standards for problem and production typewriting.

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[1] Lloyd Douglas, James Blanford and Ruth Anderson, Teaching Business Subjects, 3rd edition, Prentice-Hall, Inc., 1973.

CHAPTER FOUR

COMPETENCY-BASED INSTRUCTION

> Unless objectives unambiguously communicate what the educator intends to accomplish, they are of little instructional value.
>
> \- W. James Popham

The Pennsylvania Department of Education has endorsed competency-based instruction. Competency-based instruction focuses on the mastery concept that assumes that most students can learn if they are given proper instruction and sufficient time.

A competency-based system is hierarchial; therefore, it contains units that are built into a system so that the ability to perform one step naturally leads to the ability to perform the next, and in which enough steps are provided to enable the learner to reach the desired goal. Each step contains an evaluation measure which enables both the learner and the teacher to know if the student is ready to proceed to the new task.

Competency-based education has highlighted the need to systematize the methods by which teachers learn and by which they instruct their students. Instructional objectives need to be carried out flexibly with alternate methods to meet the needs of students differing in personality and ability.

V-TECS

The Pennsylvania Department of Education joined the Vocational Technical Education Consortium of States--better known as V-TECS--in 1977. This membership indicates the Department's desire to provide state vocational education programs with sound, validated instructional materials for use by instructors to improve local curriculum content. V-TECS has been organized for the purposes of developing and sharing catalogs of performance objectives, criterion-referenced measures and performance guides in selected areas of occupational education.

Each state in the consortium agrees to develop two catalogs over a contract period--450 days. Guidelines for the development of a catalog include an intensive review of the literature, random sampling of workers within an occupation, analysis of data collected, initial draft of the catalog and field review of same. The use of uniform guidelines and procedures in preparing a catalog ensures that products developed in any one state are usable in other member states.

These guidelines and procedures consist of the development of task statement booklets by a domain of job titles, selection of a representative sample of incumbent workers within the state which is developing the catalog, administration of the task statement booklets to the incumbent worker sample, computerized analysis of information collected from the sample, conversion of the task statements into performance objectives with criterion-referenced measures and a comprehensive field test and dissemination program.

There are several V-TECS catalogs representing many occupational titles related to business education. These catalogs provide vocational business teachers with sound, validated instructional materials for use to improve local curriculum content.

Every vocational business teacher should have the opportunity to receive catalogs and be trained in their use. The Pennsylvania V-TECS Diffusion Plan states that prior to catalog distribution for local program involvement, teacher inservice will be scheduled for effective installation and use.

V-TECS workshops are scheduled frequently. Any vocational business teacher who is interested in participating in this type of workshop should contact the V-TECS coordinator, Vocational Education Information Network, Millersville State College, Millersville, PA 17551 (717/872-5411, Ext. 435).

The most useful V-TECS catalog for typewriting teachers is titled Secretarial, Stenographic, Typing, and Related Occupations. This catalog (page 5) lists the intended uses which are:

1. Objectives may be compared to existing programs for possible inclusion.
2. Criterion-referenced measures may be used to test effectiveness of instruction in terms of measurable student achievement.
3. Measures may be used to determine entering student competencies, thus allowing for such things as advanced placement and individualization of instruction.
4. Measurement outcomes may be used to accept, improve, or reject an instructional procedure or system.
5. Performance guides may be used as a blueprint for designing curriculum which will support selected performance objectives.
6. Performance guides may be used as teaching points for the instructor, who may choose to develop supporting instructional objectives which are interim rather than terminal in nature.

Perhaps the best way for typewriting teachers to gain an understanding of the information in this catalog is to analyze two of the pages (Figure ___ and Figure ____) that appear on pages 130 and 131 of the catalog. Here, the important item is Figure ____, the "Instructor Checklist."

As one analyzes V-TECS catalogs, the relationship of this item to competency-based instruction becomes apparent. This material can be used readily to revise existing courses of study. Catalogs are not in themselves curriculums, and the manner in which they are used is the prerogative of those vocational teachers who make reference to these materials. However, catalog format suggests the following:

Duty: Typewriting

Task: Type business letters.

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81. PERFORMANCE OBJECTIVE:

Given 3 edited, rough-draft letters and required supplies, plus instructions for typing any special features, type the letters in the format specified by your instructor, making one carbon copy. A checklist will be used to rate performance. All applicable items must receive an acceptable rating. (1)

CRITERION-REFERENCED MEASURE:

Your instructor will provide you with rough-draft copy to type in specified letter format.

PERFORMANCE GUIDE:

1. Select appropriate supplies.
2. Make necessary typewriter adjustments.
    a. set correct margins for letter length.
    b. adjust line-space regulator.
    c. set appropriate tabs.
3. Assemble carbon pack and insert into typewriter.
4. Type each letter in specified format.
5. Proofread carefully, correcting all errors, before removing each letter from the typewriter.

Figure ___

INSTRUCTOR CHECKLIST

Type business letters.

ACTIVITY	RATING	
	Acceptable	Unacceptable
1. Used specified format.		
2. Balanced copy vertically.		
3. Balanced copy horizontally.		
4. Did not exceed specified time limit (10 minutes for short letter, 20 for a medium, and 30 for a long letter).		
5. Used appropriate type of punctuation (open or mixed).		
6. Corrected all errors neatly on original copy.		
7. Corrected all errors neatly on carbon copy, with no smudges.		
8. Inserted carbon pack correctly, without wrinkling carbon paper.		
9. Typed any special features correctly.		

Figure ___

1. Performance objectives may be compared to existing programs for inclusion. This does not mean that all users will adopt all objectives contained, but those objectives which are compatible with the user's goals can be adopted with increased confidence because of the strong data base.
2. Performance objectives may be adopted as the basis for new curriculum development.
3. Performance objectives may be shared with the student prior to instruction, revealing the anticipated competencies which will result from that instruction.
4. Performance objectives attained by students may be revealed to potential employers, thereby describing exactly those tasks which the student can perform and how well he/she can perform them.
5. Performance guides may be used to assist in sequencing instructional units. For example, in the catalog cited above ten tasks appear under the duty "Performing Mail Activities." As those pages are separated from the remainder of the catalog, the curriculum designer can lay them out and get a clearer picture of the best teaching sequence.
6. Performance guides may be used as interim teaching points which must be addressed in preparing the student for task accomplishment. The number of teaching points required may vary, and may appear in any of those forms (cognitive, affective, or psychomotor).
7. Criterion-referenced measures may be used to test competence after exposure to the instruction.

8. Criterion-referenced measures may be used to test effectiveness of the instructional process, providing feedback to the instructor as to existing weaknesses in that process. Teaching effectiveness is thereby ultimately measured by how well the learners are able to perform tasks specified.

Before a revision is made of a present course of study, the teaching staff should become trained in the use of V-TECS catalogs and use those that might be applicable. A revised course of study should incorporate the use of material that is published in a V-TECS catalog.

Planning

To plan a competency-based program in typewriting, the teacher should

1. determine the competencies (terminal performance objectives) to be achieved in the course;
2. decide how the competencies will be evaluated;
3. write performance objectives; the performance objectives may be cognitive (knowledge), psychomotor (skills) or affective (attitudinal); each performance objective should state a measurable behavior, the conditions under which the behavior will be demonstrated and the criteria against which the performance will be judged;
4. arrange the performance objectives in sequence;
5. pretest to determine needed competencies that have been achieved;
6. formulate tasks that will contribute toward the accomplishment of each objective; cognitive tasks should proceed upward from knowledge to comprehension, to application, to analysis, to synthesis, and ultimately to evaluation;[1]

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[1] Benjamin Bloom, Taxonomy of Educational Objectives. D. McKay, New York, 1964, p. 18.

7. select teaching strategies that follow psychological principles of skill development;
8. evaluate resultant achievement.

Students meeting the competencies that have been prescribed should proceed to the next unit. Suitable practice procedures should be prescribed for students not yet attaining these competencies.

Guiding Instruction

In a competency-based program, instruction based on the subsequent principles can result in successful learning.

Techniques, Speed and Accuracy

Proper techniques, speed and accuracy are outcomes that must be acquired in learning to type, and one should not be emphasized at the expense of the others. Any of these three elements should not be divorced from the other two. Techniques should be stressed initially. The way a student handles the typewriter in the early stages of learning to type is more important than speed or accuracy.

Effective Practice

Effective practice is a necessary part of skill building and should be purposeful, specific, distributed and individualized. Students need to know the purpose of each practice period. The objective the student is working for must be achievable but must involve effort. Practice should be directed toward specific short-term goals. Practice for speed must be separated from practice for accuracy. Practice should be for short periods during the first lessons and for longer periods as the typist becomes more skillful. The best practice is individualized.

Reinforcement

Reinforcement is essential and should be corrective, informational, motivational and immediate. The typewriting teacher is a coach. One important task of the teacher is to diagnose each student's difficulties and prescribe corrective measures. Students learn in different ways. An oral explanation, a demonstration, a filmstrip presentation or a bulletin board display can supplement textbook instruction and help students grasp needed information. Some of the informational items that a student should know are how to divide words correctly, space correctly after punctuation marks, express numbers, capitalize and indicate titles of books and articles in publications. A competency-based typewriting program should emphasize both intellectual and interpersonal competencies. A skill is learned most efficiently when a student is confident and feels that the information or skill to be learned is important. Some students are more easily discouraged than others. Such students need praise and individual attention. A student will continue to be motivated if he or she is in a pleasant, noncritical learning situation, needs or wants typewriting skill and has a measure of success.

The teacher's role is to strengthen the self-image of the student and to increase each student's confidence in the ability to learn. The teacher's enthusiasm and positive attitude toward students will affect their achievement. Immediate knowledge of results is perhaps the most important reinforcement procedure. A model displayed with an overhead projector or on a bulletin board provides students with an opportunity to compare their products with a correctly completed exercise.

Self-evaluation

Self-evaluation should be encouraged, and students should keep individual records of their progress. They might make a graph to show the improvement in typing speed throughout the course. They should have pretests, practice and post-tests on the typing of letters, tables, etc., so that they can see for themselves the improvement they are making.

Degree of Transfer

The more effective the original teaching the greater the degree of transfer. Learners will transfer their typing skill to another problem-solving situation if they see how the new activity is related to the previous learning and if they have a positive attitude toward learning.

Individual Differences

To enhance achievement, the instructor should encourage students to work at their best pace; insist that students set individualized, short-term goals; emphasize self-evaluation and praise progress.

Testing Vs. Evaluation

Each skill needed to produce mailable copy should be taught, reinforced and evaluated. Teachers should observe the distinction between evaluation and testing. Evaluation takes place throughout the learning period as the teacher observes and prescribes corrective measures and as the students evaluate their progress and seek guidance. Testing should take place near the end of a major unit to determine whether an objective has been achieved.

Classroom Atmosphere

A classroom atmosphere conducive to learning must be established. Students should know at the beginning of a course the standards of conduct expected. The teacher should "Recognize speed and accuracy, but honor efficiency. Pay tribute to quickness, to being ready, to doing the job right the first time, to finishing on time. No better training could be given students."[1]

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[1] Alan C. Lloyd, "Improving Your AIM in Typewriting," Business Education World, September/October, 1972, p. 15.

Classroom Procedures

Students should follow a definite procedure in securing supplies and handing in assignments. At the beginning of the period students should pick up the paper required for the day's typing and go immediately to the typing station; put books and materials carried from one class to another in a predetermined place; see that the textbook is on the copyholder; type name and date in figures at a given place on the paper; and organize their work station, keeping supplies consistently in the same place. At the end of the period students should make sure the carriage is centered, unless the typewriter has a carrier, put chair under the table or desk and submit typewritten work in accordance with instructions.

Evaluating

Evaluation is a necessary component of typewriting instruction.

Types of Evaluation

Evaluation procedures may be diagnostic, formative or summative. Diagnostic procedures involve administering pretests to determine the competencies a student possesses when entering the course. Since students entering Typewriting I may have had a variety of previous experiences with the typewriter, diagnostic tests are especially important.

Formative evaluation occurs during the learning period, as the teacher notes the results of instruction, identifies problem areas and assigns the remedial measures. Formative evaluation is self-evaluation, evaluation by classmates or informal evaluation by the teacher. It is not graded.

Summative evaluation is the final evaluation made to determine if needed competencies have been met. Both the student and the instruction are evaluated. This is the stage of the total evaluation process at which final grades are determined.

Purposes of Evaluation

Many teachers assign grades needlessly. Why do many teachers feel the need to grade mountains of typing papers? Some of the reasons are to make sure students are progressing, to express interest in students, to motivate students, to substantiate grades and to prove that they are conscientious teachers. Other ways to meet each of these objectives are given below.

Check Progress. A teacher should set terminal and enroute goals for each unit and share them with students. Then the teacher and the students know at any time how near they are to a designated goal. If they are not progressing, the students should ask the teacher for guidance.

Express Interest. Papers which may take hours to mark are of only slight interest to many students. Some students may not read the comments written to guide future efforts. They may only look at the grade and discard the papers. But if the teacher circulates about the room and comments on work being produced by individual students, the teacher is certain that a comment is heard. The teacher also is available to listen to what students have to say about their problems and their progress. If rapport exists betweeen the teacher and the student, both will benefit from exchanging ideas.

Motivate Students. Few things motivate students as much as success. Students should receive recognition and praise for progress. Each lesson should contain a variety of activities.

Typing games are effective in increasing student interest. Some games reward accurate typing. In a relay race, each row of students competes as a team. The first student in the row must type a sentence with no more than one error before the second student can start to type. The row that finishes first wins. In another game, students compete individually. Each student types until an error is made. Then the student must start again. At the end of a minute the student who has typed the most consecutive error-free material is the winner.

Use community resources to encourage and motivate students. Display want ads and application forms from local companies and pictures of employed graduates at their offices. Use media such as tapes, records, films, filmstrips and transparencies. Use humor to relieve tension and reduce the fear of failure. Above all, be enthusiastic!

Substantiate Grades. Tests should be given at or near the end of a report period or at the completion of a unit. Testing should occur only after the student has had many opportunities to build skill through practice, teacher assistance and timings on the types of material to be included in the test. The grade at the end of a report period should not be an average of the student's scores while learning. Instead, a grade should reflect the student's maximum ability to perform tasks that have been taught, practiced and improved during the grading period.

Prove Ability. Nothing demonstrates the ability of a teacher more vividly than the success of students. The number of papers marked is not a true indication of a successful teacher; student performance is. A conscientious teacher spends more time planning lessons and helping and encouraging students than in grading papers. Grading papers must be secondary to the main purpose of instruction--helping students learn to type efficiently.

Grading

Teachers, students, parents and employers need to be knowledgeable about the grading system used in competency-based programs. Three of the ways in which a competency-based program may be graded follow.

Pass-Fail

Students may receive a P to indicate that they have passed the competencies for the course or an N to indicate that the competencies for the course have not yet been achieved. When a student receives a P, he or she moves to the next unit and continues until all the competencies in the typewriting program have been achieved. Then the grade or designation which reflects the student's ability at the end of the program is placed on the transcript; for example, C or Competent, B or Commendable, A or Outstanding.

Competency Lists

At the completion of the typewriting program or at his or her exit from the typewriting course, a student receives a list of competencies which he or she has been able to demonstrate. This list can be shown to prospective employers.

Domain-referenced Grading[1].

Performance objectives, all of which begin with a verb, are written for the typewriting program. Then they are classified according to Bloom's Taxonomy. Students who can follow simple directions and type acceptable copy (application level) would receive a C. Students who can analyze unarranged copy which contains complex directions (analysis level) and type it correctly would receive a B. Students who can make decisions regarding the copy, as would be required in an in-basket project (evaluation level), would receive an A.

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[1] Adele F. Schrag, "Domain-Referenced Grading: An Alternative Reward System," Business Education World, September, 1977, p. 21.

CHAPTER FIVE

INDIVIDUALIZING TYPEWRITING INSTRUCTION

> The rate of learning varies greatly within any group of students; therefore, the method and rate of instruction should also vary.
>
> -John L. Rowe

Planning for the needs of each student is one of the basic principles of education in America. Since all students do not learn in the same way or at the same rate, educators recognize the desirability of providing learning objectives and materials which will meet the needs of each individual student.

Implementing Individualization in Business Education

In a recent statement titled, "This We Believe About Implementing Individualization of Instruction in Business Education," the Policies Commission for Business and Economic Education states that individualization of instruction is psychologically sound and educationally valid and that it has particular merit for all business education subject areas. The Commission further states that business teachers have a responsibility

1. to become informed about the philosophy and appropriate uses of individualization of instruction.
2. to develop, refine, and research appropriate materials, methods, techniques and evaluation procedures that provide for continuous student progress.
3. to recognize each student's needs, interests and abilities when formulating appropriate objectives preparatory to individualizing instruction.
4. to provide a variety of learning options, which may be either individual or group in nature, to accommodate individual learning styles of students.

Efforts to individualize typewriting instruction in the past have been limited by lack of appropriate instructional materials and equipment and by the lack of expertise in this method of teaching on the part of many instructors.

In the traditional typewriting classroom, students have been given the same objectives and the same amount of time in which to meet these objectives. Students who learn most rapidly have received the highest grades.

Today, teachers of typewriting are experimenting with a number of forms of individualized instruction. The simplest form may be the setting of individual practice goals for students according to their need for either speed or accuracy development. The other extreme may be the setting of terminal objectives for the course and permitting students to progress at their own rate until they have met the objectives.

With the establishment of performance objectives in competency-based education and with the development of educational media, such as self-paced instructional materials, typewriting teachers are now considering individualized instruction as a viable alternative to group instruction.

Basic Concepts of Individualization

Two concepts are evident in the individualizing of typewriting instruction--the concept of independent progress, wherein stated competencies are to be achieved by all students within a flexible time schedule, and the concept of individual objectives for each student, reflecting what the student wishes to accomplish in the course.

Independent Progress

The independent progress concept is not new in business education. For many years, private business schools have used this method, with open-entry, open-exit enrollment.

As this concept is currently applied in the high school classroom, those competencies which have been determined as desirable outcomes of a typewriting course become the constant. The variable is TIME--the time required by each student to meet the stated competencies.

In the independent progress classroom, students are encouraged to work as rapidly as they can or as slowly as they must. Students who learn slowly are freed from the pressure of trying to keep up with the "average" student to which the traditional classroom teaching is geared. Those who learn more quickly are given an incentive, such as being assigned to a cooperative business education program. The practice of assigning additional work to those who have met the minimum competencies early is regarded by most students as a penalty, and they will therefore use all the time that is available just to meet the competencies.

Individual Objectives

A more flexible program of individualization (but usually more difficult to administer) is the selection by each student of competencies to be developed and the option to enroll in another course when these competencies have been met.

In this plan, specific competencies are outlined and a fraction of credit attached to them. For example, learning to operate the typewriter at a rate of 25 words a minute might be considered the first phase of a typewriting course. A student interested in learning only the keyboard and some basic applications might choose to take a one-semester course in typewriting. Later, this same student might wish to attain vocational typewriting skill and would complete the remaining phases of the typing program. In the last phase of a vocational typewriting program students might be given the option of developing competencies in medical, legal or technical typewriting.

An example of an individualized objectives program might be:

		Credit	Course
Phase I:	Basic Typewriting Skill (Keyboarding skill at 25 wam)	1/4	Typewriting I
Phase II:	Basic Applications (Memos and short reports; personal letters)	1/4	Typewriting I
Phase III:	Business Applications (Business communications, tables, manuscripts)	1/2	Typewriting I
Phase IV:	Advanced Typewriting Applications (Skill building on production-type problems)	1/2	Typewriting II
Phase V:	Career Typing (Simulation with option: medical, legal, technical, or business typing projects)	1/2	Typewriting II

Both the independent progress and the individual objectives concepts provide for differences in the way students learn, the rate at which they learn, and their motivation to learn. Either concept of individualizing instruction would seem to have advantages over the lockstep method of expecting all typewriting students to meet the same competencies within the same time period.

Learning Environments

Experiments with individualization of typewriting instruction have ranged in environment from the conventional typewriting classroom to the completely open typewriting laboratory.

Conventional Classroom

Typewriting teachers may use individualized instruction within the conventional classroom. One successful method is the setting aside of three days a week for independent progress by students in typing assigned projects. The other two days of the week are used for group instruction--technique development and skill building in both straight-copy and production rates. For the assigned projects, suggested completion dates are given. Projects are checked for mailability; papers that are not mailable are returned to be corrected or retyped. The grade for the projects, based on the number of mailable projects completed by the end of the term, is averaged with the straight-copy and production rate grades.

The independent progress method is especially adaptable to a Typewriting II class. During the first few days of the term, group drills may be given to review letter styles and placement, centering, tabulations, manuscripts and footnotes. After a thorough review, students may then begin work on the self-paced typing projects. The teacher observes, diagnoses and prescribes, demonstrates and explains on an individual basis and evaluates throughout the course. Periods of time for skill building may be interspersed throughout the term as the teacher sees the need.

Advantages. Some teachers prefer individualizing in the conventional classroom rather than in the open laboratory. They give the following reasons:

1. Teacher-directed drills for skill building result in more efficient use of students' time than the method often used in an open laboratory situation.

2. All students can profit from some kind of drill work on production material, while still progressing at their own rate on completion of assigned projects.

3. Evaluation of students' work may be done in the classroom as the instructor moves around the room and points out errors or commends student performance.

Disadvantages. In the conventional classroom, some students who are permitted to progress at their own rate have difficulty in organizing their work schedule and tend to procrastinate in completing the work.

Open Laboratory

The individualized learning center, or laboratory, is becoming increasingly common. The typical laboratory contains individual learning stations or carrels which are equipped for multimedia instruction. (Figure_______ shows a learning station equipped for individual instruction.)

Self-paced learning materials are prepared in advance to direct the students through a sequence of learning activities which enable them to meet the stated competencies. To accommodate a variety of learning styles, options are provided for students in the way of alternate learning activities. Built into the learning packages are progress checks, provision for recycling and measurement.

Students work at their own pace through the learning packets. The teacher monitors their progress, gives additional explanation of material as needed and prescribes alternate learning activities when students are unable to meet their objectives. The teacher also supervises the measurement which determines whether students have reached the desired competencies.

Students are encouraged to set their own completion time objectives. For those students who have difficulty organizing their time, the teacher may provide assistance in setting short-term goals.

Advantages. Instructors involved in the laboratory environment for individualized instruction cite the following advantages:

1. Students who are absent for illness or other cause can resume their work when they return to school without the feeling that they have missed some important presentation which will be lost to them forever.

2. The more capable students are able to complete more work in a shorter time when they are not paced by the "average" student, as in a traditional learning situation.

3. There is a 1 to 1 relationship between student and teacher rather than a 25 to 1 relationship.

4. Teachers are freed from group instruction to give individual help to less capable students.

5. Transfer students who enter the class after the beginning of the school year may be given pretests to determine competencies already attained and placed at the appropriate beginning point.

6. Multimedia presentations give an alternative learning activity to students who have difficulty in grasping the printed or spoken word.

7. Students get daily feedback on their progress by meeting enroute goals and do not have to wait until a specified testing period to know if they are meeting the desired competency.

8. Students are given time to meet each competency before having to move to topics which require prerequisite skill.

9. Students with prior typewriting instruction may be given pretests to avoid repetition of instruction in skills already attained.

10. Students learn to work independently and to follow printed instruction

11. Students learn to organize their work and manage their time efficientl

12. Students develop a sense of responsibility for their own learning.

Disadvantages. Weaknesses which have been pointed out by teachers using the open laboratory include the following:

1. Students who do not have the ability to discipline themselves may procrastinate and waste time.

2. The motivational support given by a teacher in group skill-building activities is not present.

3. Students do not have the motivation of competition with peers which stimulates them to progress. Teachers must be more responsible for motivation.

4. Teachers are required to spend more time to adapt their teaching to the needs and level of each student.

5. Students follow approximately the same route through the course but at varying rates of speed. This does not compensate for the difference in students' backgrounds.

6. Students may misinterpret directions and do problems incorrectly unless there is strong teacher guidance.

Many of these disadvantages can be overcome by carefully designed learning materials and by teachers who are committed to individualized instruction and who have a genuine desire to help students.

Strategies

One of the primary considerations in developing an individualized teaching strategy is the selection of instructional materials. Typewriting teachers who decide to individualize will need to start with a carefully selected textbook. In addition, they will need self-paced learning materials and audiovisual support materials.

Learning Materials

Early attempts to individualize by self-pacing with traditional textbook materials alone resulted in burdening the instructor with one-to-one explanations. Too, the students were frustrated when they had to wait for the instructor to guide them to their next activity.

There are commercially prepared materials available today for individualized typewriting instruction. These materials have been carefully designed by experts in the field of typewriting and are correlated with available textbooks.

If an examination of "ready-made" learning materials does not produce a package which is compatible with the objectives of a particular high school, the teachers may wish to prepare their own materials. This method may be more costly, since the teachers will need released time to prepare the materials. Various names have been used for the self-paced packages or "software" materials, such as modules, LAP's (learning activity packages) or ILP's (individual learning packages). Regardless of the title used, the materials should include:

1. terminal and interim objectives stated in behavioral terms,
2. sufficient explanation so that most students can progress without supplementary explanations and discussions from the teacher,
3. provision for periodic feedback which will keep students and teachers informed of progress,
4. alternate learning activities for students who do not meet the objectives on the first attempt, and
5. measurement techniques.

For example, an assignment sheet from a LAP for Typewriting I would be similar to Figure ______ on page _____.

TYPEWRITING

Module 4

Lesson 7

Objective

At the conclusion of this lesson you will be able to:

1. type, from arranged copy, the first page of an unbound manuscript containing a title and a footnote with no errors in placement or arrangement of manuscript parts and with no typographical errors.
2. type, from rough draft, an unbound two-page manuscript containing a title, proofreaders' marks and a continuation-page heading with no errors in placement or arrangement of manuscript parts and with no typographical errors.

Materials Needed

1. textbook: ____________________
2. reference guides ___ and ___.

Procedure

1. complete job ___as directed on pages ___ and ___in your textbook.
2. complete job____as directed on pages ___ and ___in your textbook.

Evaluation

Submit your completed work and this module page to your instructor.

Next Activity

____You have met your objective; turn to Lesson__on next page.

____There is still room for improvement. Complete Job___on pages___and___in your testbook and show it to your instructor before completing Lesson___.

Figure____

Media

Mediated materials are important in individualized typeriting instruction, since they free the teacher to become the manager of the learning system.

Software. The increasing popularity of cassette tape players makes cassette recordings a convenient medium in individualizing typewriting instruction.

Cassette recordings may be used in presenting new material or as remedial or makeup work. They may be prescribed for speed and accuracy development on an individual basis, according to a student's needs. The recordings may be prepared in advance as an integral part of the learning package, or they may be prepared during the term to fill a specific need of one student or of a group of students. Cassettes also may be used as timing devices to eliminate the need for timers at individual learning stations.

Tapes are effective when used with correlated slides. They may be used by beginning typewriting students in learning the keyboard. The teacher is then free to act as observer to reinforce the students in developing correct techniques in key stroking and manipulation of machine parts.

Slide-tape presentations also are a convenient way of presenting material on letter styles, centering, tabulating and typing all kinds of business papers. Typewriting instruction via slide-tape presentations--whether of keyboard reaches or of production material--gives less capable students the opportunity to repeat the presentation until they have grasped the necessary learning involved. Slide-tape presentations provide for students who have been absent the opportunity to learn what they might otherwise have missed.

Commercially prepared cassette recordings and slide-tape sets are available to fill a variety of needs in typewriting instruction and may be used in an individualized teaching strategy in either the conventional classroom or open laboratory environment.

Filmstrips, designed for use with a paced reading device, are available commercially and may be used in developing typewriting skill on an individual basis. The filmstrips may be integrated into the self-paced learning package, or they may be prescribed by the instructor as alternate learning activities for students needing additional drill materials.

Hardware. Individual learning stations or carrels in the typewriting laboratory may be equipped with any or all of the following instruments:

Audio source	Cue-stop cassette player (may have foot pedal control, if desired)
Visual source	Slide carrousel projector (with remote control switch controlled with foot pedal)
	Rear-view projection screen (allows picture to be visible in brightly lighted room)
	Paced filmstrip projector (designed for individual use in lighted room)

To conserve space, typewriters in the learning stations should be of the fixed-platen type. A timing device in each carrel is desirable but not absolutely necessary.

In the typewriting laboratory, students progressing independently will not need the audiovisual equipment all of the time. Some carrels may be equipped with cassette players only, others with filmstrip projectors and still others with cassette players and slide projectors. Other carrels need to be equipped with typewriters only.

Mechanical pacing devices are commercially available to increase students' stroking speeds on an individual basis. One device can be used also to diagnose student weaknesses such as jerky rhythm, hesitation in carriage return or in stroking certain keys, or removal of eyes from the copy.

Typewriting teachers who have videotape equipment available will find many opportunities for its use in the individualized classroom or laboratory.

Management

In the open laboratory, management differs from that in the traditional classroom because students have more freedom of movement within the laboratory.

Attendance. In the open laboratory, students may be given the option of coming in at a time convenient to the teacher to complete their assignments. However, best results are obtained if students are scheduled for a regular period each day, with the laboratory available at other times for those who wish to spend additional time on their assignments.

Recordkeeping. Students may keep a personal progress chart on which they record their progress on straight-copy timed writings and the progress made on production tests. The teacher also would keep a master record.

Pretests given at the beginning of each unit give students a starting point and enable them to see their progress. These pretests can be shorter in length than the post test. For example, a pretest given at the beginning of a unit on letters might consist of a 15-minute timing similar to the 30-minute measurement timing which generally is given at the end of the unit.

Measurement. Measurement may be spaced through the length of the course, with tests given when students are ready for them. With competency-based instruction, students may need to be given more than one opportunity to take the tests. If they do not meet the competency in the first measurement, they may be recycled or given alternate learning activities before trying the test again.

To facilitate classroom management in the independent progress method, certain days of the week, e.g., Tuesday and Thursday, may be set aside as test days. Students who are not ready for tests on those days would consider them as laboratory days.

CHAPTER SIX

TRENDS

> Business educators who are professional must stay abreast of conditions in a rapidly changing office environment.
>
> -Shirley Wong

One of the elements changing most rapidly in the world of business is the way in which the typewriter is used. As a result, typewriting teachers constantly are challenged to update their instruction to reflect current office practices.

Word Processing

Sophisticated typewriters are used in word processing to prepare communications, such as letters, memorandums and reports; those who are employed in this area become specialists in the use of this equipment. These employees generally are located in a word processing center and are classified as correspondence secretaries. To be a specialist in using word processing equipment, an office employee must have competency also in English fundamentals (sentence structure, vocabulary, spelling, punctuation, capitalization and proofreading).

Typewriting Skills

Before learning to operate sophisticated word processing equipment, students need a high degree of proficiency in operating electric typewriters--those with a type bar and those with a single element. For office use, typewriters with a single element are outselling other electrics.

The printing element typewriter provided the basis for the introduction in 1964 of a magnetic tape-editing device which gave the typewriter a memory capability. Basically, the typewriter is wired to a tape recorder which produces a magnetic recording as the typist strokes the keys. When the incorrect key is struck, the typist merely backspaces and types over the error. The correction is made automatically on the tape, so that a correct copy of the typed material is obtained at speeds ranging from 150 to 500 words a minute when the tape is played.

The magnetic typewriter originally was conceived as an automatic typewriter to produce individually typed copies of the same letter with little help from the typist except for inserting the paper and typing the variable information. Later, the magnetic typewriter was found useful in typing lengthy reports and other communications where revisions are made frequently.

The past two decades have seen great progress in the application of magnetic-media typewriters to office work--both in business and in the professions. The original magnetic typewriter made a reel-type recording; later developments used magnetic cards, which provided easier access, or cassettes or visual screen display.

The number of manufacturers of magnetic-media typewriters is increasing constantly, and the machines are becoming more sophisticated. Some machines use a "daisy wheel" instead of the "golf ball" element containing the letters. Some print with ink spray instead of with a ribbon. (Figure_____. The "daisy wheel" and "golf ball" printing elements.)

Word processing is the modern concept of increasing office productivity by applying modern technology through magnetic media typewriters.

Although these machines are somewhat expensive, some schools are setting up word processing laboratories that integrate instruction in Typewriting II and in machine transcription with the operation of an automatic typewriter.

Related Skills

Many of the competencies needed by the word processing typist are being taught without the use of expensive equipment. Certain factors in skill development are given in Typewriting II where or when students subsequently may be employed in a word processing center.

Rough Draft Speed. Since much of the typing on magnetic typewriters is in the form of rough drafts, the word processing typist needs a high typing speed. Students are encouraged to increase their gross typing speed through drills in typing rough drafts. In word processing centers, techniques of work measurement are applied, with an entry-level standard of 100 lines per hour on an automatic typewriter. Students in a Typewriting II class may be given this standard as one of the competencies to be met in attaining vocational skill.

Proofreading. Operators of magnetic-media typewriters need to be capable of finding and correcting their own errors. The magnetic typewriter does not automatically produce correct copy--the copy must be proofread and corrections made by the operator. Students need to assume responsibility for proofreading their own work. Proofreading needs to be taught as a special skill, using exercises to show students the places to look for errors and the kinds of errors made most frequently.

Formatting. Typing drills should include format problems. In the Typewriting II class, students are encouraged to rely less heavily on proofguides and to make decisions on their own about the best way to set up material. Practice materials include all types of business reports--financial statements, managerial reports, minutes of meetings and various types of legal and medical documents. Materials also include handwritten copy and typewritten rough drafts that contain proofreaders' marks.

Language Skills. Special attention is being given to the typist's skills in punctuation, grammar and spelling. Drills are given in typing from unarranged copy which requires students to insert the correct punctuation.

Typing Style. To increase office productivity in a word processing center, many office managers are standardizing letter styles. There is a current trend among typewriting teachers to familiarize students with all letter styles and kinds of punctuation but to require them to type the majority of letters in block style and with open punctuation, using a standard line length of 60 or 70 spaces.

Computerized systems used in post offices today dictate changes in the style of typing envelope addresses. So that the Optical Character Reader (OCR) can read and sort the mail automatically, students are now being instructed to use the following guidelines in addressing envelopes:

1. Type the envelope address in the lower right quarter section of the envelope.
2. Eliminate all punctuation.
3. Block, single space, and capitalize the complete address.
4. Place street address, spelled correctly, on line immediately above the city, two-letter state abbreviation and zip code.
5. Place city, two-letter state abbreviation and zip code, in that sequence, on bottom line.
6. Type attention line in caps on line below company name.
7. Type mailing notations--SPECIAL DELIVERY, REGISTERED--below the stamp in all caps.

8. Type special instructions, such as PLEASE FORWARD, HOLD FOR ARRIVAL, OR PERSONAL, two lines below the return address. (Figure______ illustrates the manner in which an envelope should be addressed.) Students should be provided with copies of the two-letter state abbreviations and required to use them in all correspondence.

Leaflets for addressing mail for automated processing are available from the United States Postal Service.

Metrication

The prospect of changing to the metric system of measurement has implications for typewriting. Eventually, typewriter manufacturers may design their machines to coincide with the metric system so that vertical and horizontal spacing can be measured accurately by the centimeter.

In the meantime, some teachers are instructing students to set their margins according to the number of spaces required for a particular task, avoiding the use of inches as a measure. For example, students are taught to use a 50-space line of elite type (40 of pica) for a short letter, a 60-space line of elite type (50 of pica) for an average letter and a 70-space line of elite (60 of pica) for a long letter. Equating horizontal spaces with centimeters is not practical, since there are approximately 4 pica spaces to a centimeter and approximately 5 elite spaces to a centimeter.

In teaching manuscript typing, students may be instructed to use margins of two and one-half centimeters for top, bottom and side margins of an unbound manuscript, with a five-centimeter top margin on the first page of the manuscript. However, it is probably less confusing to students if manuscript spacing is taught in terms of lines and spaces rather than inches or centimeters.

Simulation

The introduction of realism into typewriting classes is evident--especially in a Typewriting II course. There are many types of simulation in use, ranging in scope from basic tasks that can be completed in one class period or less to "model office" simulations which require weeks or months to complete.

Basic Task Simulations

In its simplest form, simulation is merely the assigning of an office-type task to be done, using copies of office stationery and setting realistic standards as to time and mailability. For example, the task may be form letters to be addressed to a list of persons or a group of invoices to be typed. Evaluation is based on the number of mailable items completed in the allotted time. Or the simulation may be a series of different tasks to be completed in sequence, with evaluation again based on the number of mailable items completed. The teacher employs various methods of introducing realism into these tasks--using names and addresses of local persons and companies, or using copies of actual letterheads and forms.

In-Basket Projects

An effective way of introducing realism into the typing class is through an in-basket project, which may be one or several periods in length. The in-basket project involves students in decision-making and in determination of priorities.

A typical in-basket project consists of copies of about 10 actual business papers which may confront office typists--memorandums, telephone messages, letters and reports. Students are encouraged to determine the order in which these items should be handled and the correct method of typing them. Then they actually produce the typewritten documents needed. The project is based on the assumption that the students have had prior experience in reproducing the kinds of typewritten communications required.

Practice Sets

There are a number of typing practice sets available from commercial publishers. The practice set uses a flow-of-work procedure, with each individual student processing a set of papers through a simulated organization. Students work independently and progress at their own rate. Specialized typing practice sets are available also for students preparing for a career in either a medical or a legal office.

Model Office Simulations

In the model office, students are involved in a "position" simulation--rotating from one position to another within a fictitious organization. Students are required to interact with other workers and have the opportunity to see how their work affects the routine of others in the organization.

This type of simulation usually involves a time span of several weeks or even a whole semester. Several model office simulations are available from publishers.

Local Simulations

In some high schools, teachers are experimenting with the preparation of their own simulations, based on a business office in the local community. A teacher who has access to an office identifies the types of business papers ordinarily typed by beginning typists in that office. The next step is determining the style and format used by the company. A style manual used in that office is helpful. The teacher then designs a simulation--a series of tasks which are as realistic as possible in light of the information gathered from the office. Confidentiality must be maintained or a fictitious name used. Simulations of this kind help to bridge the gap between the typewriting classroom and the office. They are especially helpful for students who are unable to participate in a cooperative work experience program.

CHAPTER SEVEN

MAINSTREAMING

> As adults, nonhandicapped and handicapped people work, play, and live together in the same community. As business educators, can we meet the challenge in our classrooms?
>
> -Lloyd L. Garrison

Integration of students with physical and learning disabilities into the regular classroom is one of the greatest challenges facing typewriting teachers today. This program, known as "mainstreaming," was mandated by the Education for All Handicapped Children Act (PL 94-142) passed by Congress in 1975.

Implications

Mainstreaming is based on the premise that it is best to educate students in the least restrictive environment possible so that they eventually will be capable of living and working as self-reliant adults in the mainstream of society. The law also requires that an individualized education program be provided for each student.

Individualization

A written statement for each handicapped student is required by the law. This statement must include:

1. present levels of educational performance,

2. annual instructional goals, including short-term objectives,

3. specific educational services to be provided for the student and the extent to which the student will be able to participate in the regular program,

4. beginning date for the service and projected ending date,

5. evaluation procedures for determining whether objectives are achieved.

Resources

Many teachers, although they favor mainstreaming as an educational reform, feel they are not prepared to deal effectively with handicapped students. They can overcome this feeling of inadequacy to some extent by reading some of the professional books and magazine articles dealing with training exceptional children. Teachers can gain much valuable help also by attending in-service training programs, workshops, and conventions dealing with educating the handicapped.

Vocational resource persons are being trained especially to serve as advisers to teachers who have exceptional students in their classrooms. These vocational resource persons serve as liaison between teacher and parent and between teacher and administration.

The *Pennsylvania Deans' Projects on Teacher Education and Mainstreaming*, published by the Department of Education in 1977, provides information on materials available for pre-service and in-service teachers and for parents, administrators and support personnel.

Typewriting teachers need not feel they have sole responsibility for handicapped students in their classes. They should consider themselves part of a team consisting of school administrators, vocational resource persons, special educators or counselors, social workers and the students' parents. All of these persons working together are responsible for the individualized educational program for each student.

Special Strategies

A positive attitude on the part of the typewriting teacher is helpful in enabling handicapped students to work side by side with other students. Differences between students should be minimized. Emphasis should be on what the handicapped students can learn to do, rather than on their limitations.

Since an individual program is necessary for each student with mental or physical handicaps, the teacher should be familiar with the basic principles of individualized instruction. Learning materials used in the regular typewriting classroom may need to be modified to accommodate special needs of handicapped students. More visual or auditory aids may be desirable, and objectives may be modified to reflect realistic goals for the handicapped students.

Human resources may be called upon in the person of paraprofessionals who can work individually with handicapped students. The "buddy system" is helpful if a handicapped student can be paired with an understanding nonhandicapped student.

Techniques

Handicapped students include those who are mildly retarded mentally and those who are physically handicapped or emotionally disturbed. The physically handicapped may be hard of hearing, deaf, speech impaired, visually handicapped, blind or orthopedically impaired.

Typewriting teachers need to be able to recognize handicaps, to understand how different kinds of handicaps affect learning, and to be able to prescribe learning activities appropriate to each individual student.

Mainstreaming the Mentally Handicapped

Teaching the educable mentally retarded students to type provides them with a marketable skill. Many of these students later find satisfaction in repetitive work which frequently bores those with higher IQ's.

One example of a program which has been successful in integrating educable mentally retarded students into the regular vocational typing classes was reported by Panagoplos.[1] The integration was accomplished without "watering down" the entire course content by:

1. assigning EMR students to Typewriting I classrooms on the basis of one EMR student to ten regular students,

2. adding a special reading class for all EMR's in the high school (considered vital to the success of the program),

3. giving EMR students extra assistance in reading and language arts skills, based on results of an English skills inventory test given to all students at the beginning of the course,

4. using individualized assignments after all students had been exposed to keyboard reaches for the alphabetic characters,

5. adding an Intermediate Typewriting course to the curriculum for all EMR's and a few regular students who had not met the course objectives for Typewriting I (required before they could go into Typewriting II).

"As a result of the program, mainstreamed EMR students acquired skills that enabled them to compete with regular students for employment in clerical positions in local firms," reports Panagoplos.

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[1] Panagoplos, Nicholas A., "Mainstreaming Exceptional Students in the Typewriting Program," Business Education World, September/October, 1977.

Experiments have shown that teaching mentally handicapped students in the lower grades to type has improved their language arts skills. The students also benefit from the course through increased interest in school work and in self-esteem. One ingenuous device used by a teacher in teaching the younger students was the use of color coding of the keys by applying colored mystic tape and then coloring the students' fingernails with crayolas to match the keys to be struck with those fingers.

The greatest challenge to the typewriting teacher faced with mainstreaming is to individualize instruction for mentally handicapped students so that they will not suffer a sense of defeat and frustration in competing with non-handicapped peers. The teacher must use a great deal of ingenuity in motivating students to accomplish the objectives. Objectives should be within the grasp of each student. Patience is a necessity--patience on the part of students to drill over and over again until the objective is met, and patience on the part of the teacher who must prescribe and demonstrate again and again for slow learners.

Mainstreaming the Physically Handicapped

Physically disabled students are often integrated into the classroom more easily than might be expected. Many persons with physical handicaps, such as blindness, deafness or motor disabilities, have high mental capacity and extra motivation to overcome their handicaps.

The typewriting teacher should first gain an understanding of the extent of the handicap through a friendly chat with the student and/or a person knowledgeable about the handicap. In the case of a severely handicapped student, having a physical therapist present during the chat to provide professional knowledge and suggest limitations of the student with regard to muscular strength would be helpful.

The typewriting teacher should keep in mind that physically handicapped students do not want sympathy--they want the instructor's understanding and belief in their ability to accomplish. The students want encouragement, not coddling. Standards should be high but attainable. The teacher with empathy for a handicapped student will try to put himself or herself in the student's place--try typing with one hand if there is a one-handed student in the class, or try typing with eyes closed if teaching a blind student. This way the teacher will be likely to set realistic goals for these students.

Visually Handicapped. Typewriting skill is a very useful tool for partially sighted or totally blind students to use in communicating with sighted persons who cannot read braille. At the Western Pennsylvania School for Blind Children, for example, typewriting is taught to all students in the intermediate grades so that they may use the skill in their other courses through their remaining school years. Typewriting is also taught as a vocational skill on the high school level to any student who elects to take it.

Typewriting is being taught to blind students as a vocational skill in at least one post-secondary school in Pennsylvania. One of the authors of this bulletin has had experience in instructing blind students along with sighted students in an individual-progress learning laboratory. For the unsighted students, lessons are recorded on cassettes. The cassettes contain performance objectives, materials needed, explanation of procedures to be followed and actual dictation of the material to be typed. Dictating equipment controlled by a foot pedal is used by the blind students in typing from the cassettes. Extra attention is given to spelling and punctuation exercises, since the unsighted students need to be especially well prepared in these skills. Blind students are able to correct their typewriting errors through the use of paper correction tape. At the end of their program, the unsighted students are able to produce mailable copies of almost every type of business communication. These students are limited in their ability to type on business forms and to type from rough draft copy. They are unable to proofread their own work.

Partially sighted students may be able to use the same lesson materials as sighted students, depending on the degree of sight remaining. Some partially sighted students use a special magnifying lamp made to their own prescription. An adjustable reading stand is also helpful for these students.

Hearing-Impaired Students. Deaf students may be accommodated in the typewriting classroom through the use of additional visual aids. Teacher demonstration, sign language (if an interpreter is available), along with the deaf students' ability to lip read may be used.

Slide-tape presentations used in instructing hearing students may be adapted for the hearing-impaired by using the same slides and adding abbreviated captions. Videotapes may be used, with an interpreter at the corner of the screen repeating in sign language the message the demonstrator is giving.

So that deaf students will not have to look up to know when they are at the end of the writing line, an electronic device may be attached to the typewriting bell mechanism to produce a vibration of the keyboard, indicating to the student when the bell has rung. A simple device using a pocket flashlight and a magnet, positioned so that when the carriage reaches a certain point the light will come on, will accomplish the same purpose on typewriters with movable carriages.

Motor Disabilities. Various devices may be used to help students with motor disabilities. The typewriting teacher should be aware of the resources that are available and must evaluate them in terms of the needs of each student. Examples of commercial aids that are available are a special typing book to help students with 22 different disabilities, a key plate to be installed on a typewriter to prevent muscular dystrophy students from striking more than one key at a time, and devices that enable quadriplegics to type using their mouth, head, and neck muscles.

Many times the physically handicapped students themselves can discover the best method to use in accomplishing a task. One mentally superior student with cerebral palsy could use only her left thumb for typing. She found that by bracing her palm against the base of the typewriter she could strike the keys.

Handicapped persons need a relaxed atmosphere in which to learn. Merely listening to a nonhandicapped person nearby operating the typewriter at a high rate of speed may be enough to discourage the student from ever learning to type. An individual learning laboratory makes progress easier for handicapped students, since all students are working independently on individual assignments to meet their goals.

CHAPTER EIGHT

FACILITIES AND TEACHING MATERIALS

> "Familiarity with the various materials available, as well as a working knowledge of how to obtain them, can only lead to the development of a dynamic learning system in typewriting."
>
> \- Robert L. Grubbs

Typewriting is a well established course in the secondary schools of Pennsylvania. Since it is scheduled by most high school students, the provision of adequate facilities, equipment, supplies and instructional aids is justified. The physical conditions of a classroom are important. The room should be kept at a moderate temperature and the air should not be allowed to become stagnant. There should be enough light so that students can work without eyestrain.

General Facilities

The typewriting classroom should be large enough to enable the teacher to move about the room to supervise each student without disturbing other students at work. A typewriting classroom needs to be approximately 1,000 square feet in size to accommodate 32 typewriting tables.

Acoustics

To reduce noise, the ceiling and walls of typewriting rooms should be acoustically treated. The floor of many modern typewriting rooms is carpeted. Noise can also be reduced by placing rubber footing on the leg of each desk and a pad under the typewriter. A connecting door between a typewriting classroom and another room is not advisable because noise from the typewriters will distract another class.

Chalkboards and Bulletin Boards

Fifteen running feet of chalkboard should be included in the plans of a typewriting room. The bottom of the chalkboard should be placed 3¼ rather than the usual 3 feet from the floor. This is necessary because pupils have to look over the typewriter to see the board. Bulletin boards can be placed above the chalkboard or anywhere on the wall that is convenient.

Electrical Wiring

In planning a typewriting room, the exact location of each typewriting station should be determined so that double electrical outlets--for the typewriter and a transcribing machine--can be provided.

A master switch definitely should be included in the wiring plans for all typewriting rooms. This switch is a safety measure to prevent burning out the motor of an electric typewriter which accidentally is left running. The teacher has the responsibility of turning off the switch during lunch period and after the last class.

Electrical outlets also should be provided at the front of the room for machines such as a projector and tape recorder. Electrical outlets should be capped or installed above floor level so that dust and dirt will not get into the outlets and cause short-circuiting.

Platform

Some business educators recommend that a platform be constructed so that the teacher can demonstrate in a sitting position at a typewriting desk rather than a standing position at a demonstration stand. If a platform is constructed, a demonstration stand will not be needed.

Storage

Since typewriting is a subject that requires a large quantity of supplies, a four-drawer file and more storage cabinets should be provided than are needed in the average classroom. Items that are usually stored include carbon paper, correction tape and fluid, erasers, master copies, paper, ribbons, stencils and supplementary books. Typewriting textbooks also are kept in storage during the summer months. Cabinets with sliding doors and adjustable shelves or with drawers can be built into the walls or under the windows and should be 12 to 18 inches deep.

Equipment

A heavy initial investment of funds is necessary to equip the typewriting room properly. In addition to the initial expenses for equipment, funds to replace typewriters that have become worn-out or obsolete are required. A systematic replacement plan should be adopted and a definite amount should be budgeted each year to replace equipment. In addition to initial and replacement expenses for equipment, the cost of keeping typewriters repaired and in good working order should be considered.

Furniture

Furniture that is procured for a typewriting room generally is used for many years. Therefore, the furniture that is selected should be of the proper size to accommodate all students.

Desks and Chairs. Experience indicates that stationary (fixed-top) rather than adjustable desks are preferable. Adjustable desks cost almost twice as much as stationary ones. Students rarely raise or lower an adjustable desk to fit their needs. The mechanism on adjustable desks may be in need of repair or become broken. If the mechanism of a desk breaks the typewriter will fall to the floor, causing possible injury to anyone standing near the desk as well as damage to the typewriter.

The working area or desk tops ought to be 20 by 36 inches. Experience has indicated that the majority of desks should be 28 and 29 inches high but a few should be 26, 30 and 31 inches high. When planning a room, 15-inch clearance should be allowed on each side of the desk. The minimum amount of space needed for each typewriting station, therefore, is 50 by 66 inches, or almost 23 square feet.

Desks should be secured that provide a basket or a rack at the side in which to keep books. An apron in front of the desk may make it difficult for students to sit in a comfortable typewriting position.

The selection of chairs is also important. Purchasing the best chairs available is a justifiable expenditure of funds. The chairs should have backs, be adjustable and be from 15 to 18 inches in height. There should be roughly 6 to 8 inches of space between the top of the knee and the frame of the typewriter when the student is seated. The more nearly level keyboards of electric typewriters necessitate less space between the height of the chair and the height of the desk.

Copyholder. This piece of equipment can be purchased commercially or it can be made out of metal or wood in a school shop. Each desk should contain one copyholder for it is used daily. The exact kind of copyholder to purchase or make depends on the size of the typewriting book to be placed on the copyholder, the size of the desk and the material from which the desk is made. Copyholders should be small enough to clear the carriage return of the typewriter, stable so that movement of the machine will not cause eyestrain and so designed that the base does not scratch the desk. The bottom of the copyholder may be cushioned. Inexpensive copyholders can be made out of corrugated cardboard or foam rubber. A copyholder may be improvised by using a piece of string.

Demonstration Stand. A demonstration stand can be built in a school shop. One demonstration stand should be in every room in which typewriting is offered. (As previously indicated, a demonstration stand is not necessary if a platform has been constructed for demonstration purposes.) The base of the stand should be heavy enough to prevent tipping. Since two or more teachers generally use a typewriting room each day, an adjustable demonstration stand should be used.

Typewriters

The acquisition of typewriters is an important function of the business education department in cooperation with school administrators and the board of education. Since typewriters are used in both typewriting and office practice classes, the requisition of these machines should be done on a cooperative basis. Although typewriters appear to be expensive, the converse is true when per student cost (on a depreciation basis) is considered.

Having all of the same make of typewriters in each room is a discernible trend in typewriting instruction. The main reasons for this trend are improved quality of instruction and lower maintenance cost. With one make of typewriter in a room, the work of the teacher is facilitated. Marginal stops, as well as many other machine parts, vary from one machine to the next. The teacher wastes valuable teaching time if it is necessary to explain the mechanics of different typewriters. Typewriter repair persons, for the most part, work on only one make of machine. Unless a general repair person can be secured, the cost of maintaining three or four makes of typewriters is an unnecessary expense.

Research supports the purchase of typewriters with visable keyboards. Since most business offices use elite type (20 percent more material can be typed on a page), the majority of typewriters in the classroom should have elite spacing. Typewriters can be obtained in different colors at no additional cost and make the room look inviting. Dust covers should be provided so that typewriters can be covered when not in use.

Approximately nine out of every ten typewriters used in business offices in American are electrically operated. According to Meehan,[1]

"Standard manual typewriters are no longer manufactured in America. Soon it will be difficult to replace parts for them."

James R. Meehan, "Trends in the Teaching of Typewriting," Journal of Business Education, March 1977, p. 262.

Printing Element Typewriters. The electric typewriter with the moving print element is commonly used in offices. With this type of machine, learners are not troubled with floating capitals and piling of letters--two types of errors which are frequently made by beginning typewriting students using either the manual or standard electric typewriter. Elimination of the heavy, moving carriage makes greater typing speed possible.

The printing element can be changed in order to give a variety of type faces. In a classroom situation, the element may need to be fastened permanently for security reasons. Students, however, should be aware that the element is interchangeable with elements of different faces to give variety to typewritten work.

Typewriters with the printing element are usually no more expensive than the standard electric typewriters, and they may be less expensive when the question of patent rights is settled.

Variable Spacing Typewriters. Many variations are available in typewriter spacing. Some of the print element typewriters are available in dual pitch; i.e., with a flick of a lever the machine can be changed from pica to elite spacing or vice versa.

While most typewriters are available with single, double or triple spacing vertically, machines may be obtained with line spacing of 1½ or 2½ lines to adjust to the line spacing on printed forms.

Vertical spacing on most typewriters is six lines to an inch. However, vertical spacing may vary from one line per inch to eight or more, depending on type size and style.

Maintenance of Typewriters

Because of the relatively high cost of typewriters, the maintenance of this equipment is important. The advisability of schools having a repair contract depends on the geographical location of the school and the type of service available. Schools in rural areas that do not have readily available repair service should enter upon this type of agreement. A contract costs approximately $35 to $40 a year for each electric typewriter and underwrites the cost of periodic inspections, emergency calls, labor and replacement of parts.

Since maintenance contracts may vary, business education departments should be sure they are getting full maintenance coverage on any contract that is signed. Contracts offered at less than standard costs may not include the backing of the manufacturer.

If a contract is not in force, the school should plan to have the typewriters adjusted, cleaned and oiled at least once each school year by a competent repairperson. Some distributors of typewriters do not charge for service calls during the school term if the machines have been adjusted, cleaned and oiled by them during the summer.

A machine cleaning schedule should be set up at the beginning of the school year and carefully followed throughout the entire term. This insures periodical cleaning of several of the important parts of each typewriter. A certain day each week for the typewriters to be cleaned should be designated--the first period class on the first week, the second period class the second week, etc.

To clean a machine, wipe the platen with a cloth dampened with a typewriter cleaning solution, brush out erasure debris and paper particles and, with a special brush, remove ink and dust deposits from the type bars or the typehead (typing element). When the machine is being cleaned, check the ribbon to see if it needs to be replaced.

Records of Typewriters

The following records should be kept on all typewriters in the business education department: a record card for each typewriter, a room chart of all the machines and a typewriter utilization report.

A RECORD CARD can be a 4 by 6 inch card with provision for the following information:

MAKE ______________ VENDOR ______________
SERIAL NUMBER ______________ COST ______________
ELITE OR PICA ______________ ROOM ______________
DATE ACQUIRED ______________ LOCATION ______________

Needed repair service on a machine can be recorded on the other side of this card. Some typewriter manufacturers provide a record slip in a special place inside the typewriter cover. Repairs which have been made may be a determining factor in the replacement of a particular machine; therefore, this information is important.

On 8½ by 11 inch paper the teacher should duplicate a room chart which has a block for each typewriting station and the number of the typewriter which belongs in that block. This chart can serve several purposes. Repair work needed on a typewriter can be noted, and the service representative can tell immediately which machine needs repairs. If someone borrows the typewriter, the chart shows if the machine has been returned to the right location. The chart permits the teacher to give an immediate answer to a question on inventory. It can provide a record of the dates when ribbons were changed as well as the number of ribbons used in a stated period of time.

A number painted or stenciled on each typewriter prevents students from exchanging typewriters and assists the service person in locating machines that need to be repaired.

To justify requests for new typewriters and to place on record the use of presently owned machines, the staff of the business education department can prepare a typewriting utilization report at the end of each school year. Schools offering evening instruction in typewriting should include a notation on the report about this use of the machines. Record the number of pupils, the total number of hours the course was offered and the equivalency in students enrolled for a full-year course.

An administrator can use this report advantageously when working with the board of education or business persons in the community. This record is an excellent way of pointing out the extensive use that is made of the typewriters and the number of students using them to justify the annual replacement costs. Business persons in the community, especially those who employ secretaries, are interested in the number of students taking typewriting courses.

An example of the typewriter utilization report may be found in figure_______

8 - 11

BUSINESS EDUCATION DEPARTMENT
SENIOR HIGH SCHOOL
ANYWHERE, PENNSYLVANIA

TYPEWRITER UTILIZATION REPORT

Machines in typewriting room	35
Machines used for demonstration and replacement purposes	− 3
Machines available for instruction	32
Instructional periods per day	× 6
Maximum number of pupils who might enroll in typewriting	192
Pupils enrolled in first- and second-year typewriting for a full year	154
Pupils enrolled in typewriting for a semester (60 ÷ 2)	+ 30
Total enrollment	184
Machine utilization (184 ÷ 192)	95.8%

June 19—

Fi[illegible] —

~~96~~

Supplies

A large quantity of supplies needs to be retained in each typewriting classroom. These supplies are used daily by approximately 200 students. A school, therefore, will need to budget more funds for typewriting supplies than for supplies for other business courses.

Paper

A large quantity of paper is used daily in typewriting classes. If it is kept wrapped and in a place that is not too damp or too dry, it will not deteriorate or change color. The quantity of paper to purchase depends on the amount of storage space available. Since any type of 8½ by 11 inch paper can be used, it is economical to procure the least expensive grade for straight-copy work that is not going to be erased. Some schools use white bond paper for mailable production work on which corrections must be undiscernible.

Ribbons

Ink evaporates from ribbons even when they are kept in storage. Therefore, not more than a six-month supply should be purchased at once. Fabric ribbons are available in cotton, silk and nylon. Nylon ribbons are probably the most economical because they can be used longer and produce the sharpest image. Carbon-paper and film-base ribbons also are available. A carbon-paper ribbon can be used only once and is apt to break. A film-based ribbon is used for typing offset masters and executive correspondence. Carbon-paper and film-based ribbons do not fill the keys with ink.

Correction Materials

Students should receive instruction on the type of correction materials used by office workers. These include a soft and abrasive eraser, correction fluid and correction papers. Use a soft eraser to remove surface ink and to erase carbon. Use an abrasive eraser to correct errors made on originals. Both soft and abrasive erasers with a brush on one end are available. Pencil type erasers that can be inserted into a pencil sharpener may be obtained. Art gum is best to use to remove carbon smudges and fingerprints. Correction fluid is a quick-drying liquid that can be dabbed on an error. A special kind of non-smearing fluid is available for photocopies. Correction papers are used to cover an error and are available in different colors. The coating on some correction paper rubs off easily and then the correction resembles a srikeover.

Carbon Paper

For classroom use, heavy-duty carbon paper which can be used many times is preferable to light-weight carbon paper. As the number of required copies increases, the weight of the carbon paper should decrease. The intensity or finish of the carbon paper determines the degree of darkness of the copy. Because carbon paper improves with age, it can be bought in large quantities; and schools can take advantage of a larger discount. Extreme dryness or dampness has an adverse affect on carbon paper which should be stored flat.

Students should be aware that carbon sets, copying film and carbonless paper are used in offices today. A carbon set is already assembled; it consists of a set of carbon paper and a sheet of copy paper fastened together. Carbon sets are used to save time; but because they can be used only once, they are more expensive. Carbon film looks like carbon paper, but it actually is ink on a plastic-based film. It is popular with secretaries because copies are sharp and smudge-free. While copying film is more expensive than carbon paper, it is a longer lasting product. Carbonless papers have been used for some time for business forms and their use is increasing.

Instructional Aids

Reference manual, dictionaries and zip code directories are among the instructional aids that should be available for a student's habitual use.

Textbook

The textbook, of course, is the most important tool a typing teacher has. It should be selected with attention to authorship, date of publication, readability, illustrations, teaching aids provided, durability and appearance. Each teacher should be provided with a copy of the teacher's manual that accompanies the text. To supplement the textbook, publishing companies provide a variety of resource materials such as practice sets, workbooks, drill books, timed writing booklets, charts and posters.

Media

Media-assisted instruction is becoming a way of life in the typewriting classroom. Commercially prepared recordings and transparencies are available for teachers who wish to use them. Some teachers are experimenting with the preparation of their own materials to fit their particular teaching situation.

The subsequent list of equipment and materials is representative of the types of aids available for group instruction in the typewriting classroom.

Overhead Projector and Transparencies. The overhead projector may be used without darkening the classroom. A screen or light-colored wall can be used for projection. Transparencies are available from publishers for teaching centering, tabulating, letter styles, manuscripts, etc. Transparencies may be prepared easily by the teacher to illustrate a particular concept. A transparency can be used also as a proofguide against which students may check their own work.

The use of transparencies focuses the student's attention on the directions for typing a particular problem, eliminates the need for many questions, enables the teacher to present the material more rapidly and allows the student to spend more time in typing.

Opaque Projector. The opaque projector requires a darkened classroom and a screen. The advantage of this type of machine is that any material--typewritten copy or a page from a book or magazine--may be projected directly on the machine without the necessity of special preparation.

Film-strip Projector. A special kind of film-strip projector, the controlled reader type, scans the copy at a preselected speed. It can accommodate the needs of individual students by providing controlled pacing. Film-strip series are available for keyboard presentation or review and for speed and accuracy skill-building.

Slide and Movie Projectors. Slides and 8 millimeter sound films are available for presenting keyboard drill or problem typing concepts.

Television Equipment. Videotape equipment is becoming more accessible to the typewriting teacher. It may be used for demonstrations to give all students an opportunity to see closely what is being demonstrated. Live demonstrations may be videotaped to enable students to see their demonstration at a later time or to study it more closely. Videotape presentations also are helpful for presenting material that will be used continuously. Some teachers use videotaping as a diagnostic device--by taping students while typing and then having student and teacher evaluate the student's techniques.

Pacers and Record Players. There are at least two pacers available to pace individual students during speed and accuracy development. Some teachers still use rhythm records to pace a student trying for a new speed goal or for better control. In Typewriting II classes, the record-player may be used for background music similar to that provided in many offices.

Tape Player and Cassettes. A cassette tape player may be an invaluable aid to the typewriting teacher. Cassette recordings for use in skill-building may be purchased; some teachers prepare their own recordings. Recordings enable teachers to free themselves for observing students at work and providing individual assistance. Taped lessons are helpful for use with transfer students, absentees and students who do not reach performance levels as rapidly as the rest of the class.

Check List

To help insure that a typewriting room has been properly organized, a check list may be used. A listing of the items that should be considered in the planning of this facility and indicated in the subsequent check list are:

_____ 1. Size: 1,000 square feet

_____ 2. Electrical Installations: Double electric outlets, under each desk

_____ 3. Chalkboard: Atleast 15 running feet with bulletin board above chalkboard and in other areas of room. Bottom of the chalkboard placed 3¼ feet above the floor.

_____ 4. Storage: Adequate for a large quantity of supplies and supplementary books.

_____ 5. Room Arrangement: The maximum number of students to be enrolled in one class should be determined. Each desk should be placed in the room so that aisle space (30 inches) is provided.

_____ 6. Furniture: Posture chairs and desks with provision for book storage

_____ 7. Reference Library

_____ 8. Acoustical treatment of room

_____ 9. Carpeting

_____ 10. Demonstration facilities

CHAPTER NINE

TYPEWRITING I RESEARCH STUDY

> There is plenty of evidence to show that both kinds of research (continuous action and scientific) have contributed tremendously to better and better ways of teaching.
>
> Fred E. Winger

The Business Teacher Education Department, Robert Morris College, received a grant to develop a list of the competencies which Typewriting I students should be capable of performing and to construct a series of tests to determine if these competencies have been met. To accomplish this task the Business Teacher Education Department faculty were to

1. determine the competencies which Typewriting I students in Pennsylvania schools should be able to achieve.
2. write performance objectives that would include a measurable task, the product or process to be demonstrated, the conditions under which the demonstration should occur and the standard to be achieved.
3. construct a series of tests that would give students an opportunity to demonstrate competence.
4. arrange for tests to be given to each Typewriting I student in randomly selected schools.
5. evaluate performance.
6. prepare a series of conclusions and recommendations.

The task was divided among the business teacher education faculty and carried out during a recent school year. A survey of typewriting research studies, articles by typewriting authorities, chapters of methods books, curriculum guides from other states and teachers' manuals for the typewriting textbooks was made to determine the competencies which Typewriting I students should be able to demonstrate. This survey revealed a lack of agreement on the needed competencies and also on the performance levels which should be set. For example, some sources suggested numerous tasks including chain feeding envelopes, composition at the machine, typewriting from hand-written copy and solving problems without specific instruction. Other sources suggested fewer tasks. Standards also varied. On five-minute straight copy tests, studies reported by West[1] indicate that students average two errors a minute in typing straight copy. On the other hand, Nord[2] reported that 60 percent of the teachers of Typewriting I selected from each of the fifty states indicated a maximum allowance of five errors on a five-minute writing.

Because there was little unanimity of opinion, the faculty members who determined the competencies decided to require tasks stressed in textbooks used in Pennsylvania and to submit a list of competencies to a task force for comments and suggestions. The task force was composed of typewriting teachers at secondary schools, professors at teacher-education institutions and two typewriting authorities

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[1] Leonard West, Acquisition of Typewriting Skills, Pitman, New York, 1969

Daryl Nord, An Analysis of Selected Elements in First-Year Typewriting Within American High Schools. University of North Dakota, 1976, p 196.

Competencies

After consultation with the task force the competencies √decided upon were

1. correct techniques used in typing,
2. straight copy speed and control,
3. production skill on common typing problems,
4. knowledge of typing style and English usage,
5. proofreading ability and
6. desirable work habits.

Performance Objectives

Performance objectives were written for each of the competencies. The goal in formulating competency performance levels was to develop guides for determining acceptable performance rather than to provide a basis for grading students. The following considerations affected the performance objectives set:

1. The standard for straight copy was set between published standards as low as 32 words a minute with 13 errors and as high as 40 words a minute with 5 errors.
2. Proofreading and correction of errors were required since many students take only one year of typewriting and these skills are needed if mailable work is to be produced. The quality of corrections was not judged since paper for the tests was supplied by the individual schools.

3. Letter typing is a major area of instruction; therefore, a 20-minute rather than a 10-minute timing on letters was selected.
4. The same rate, 14 words a minute, was selected for both letters and the rough-draft manuscript since the rough draft was comparatively easy.
5. The rate on typing tables, unarranged memorandums and invoices was kept constant--10 words a minute.
6. An objective test was used to measure typewriting style and English usage, since it would require less time and would cover more items than a performance test.
7. The actual proofreading skill demonstrated in the test provided a more realistic measure of proofreading ability than could be obtained by including a proofreading exercise.

The performance objectives which include a measurable task, the product or process to be demonstrated, the conditions under which the demonstration would occur and the standard to be achieved are indicated in Figure ___.

PERFORMANCE STANDARDS FOR TESTS GIVEN TO TYPEWRITING I STUDENTS IN THE HIGH SCHOOLS OF PENNSYLVANIA

Task	Performance	Standard
1. Given straight-copy paragraph material of average difficulty (approximately 1.5 SI)	type for a period of five minutes	at the rate of at least 35 words a minute with not more than 7 errors
2. Given a 20-minute production timing on unarranged, average-length business letters containing basic letter parts	type the letters in acceptable form and proofread and correct any errors	at a minimum production rate of 14 words a minute*
3. Given a 15-minute production timing on short, unarranged interoffice memorandums	type the memorandums in acceptable style using preprinted forms, make a carbon of each and proofread and correct any errors on both originals and carbons	at a minimum production rate of 10 words a minute*
4. Given a 15-minute production timing on rough-draft manuscript containing both proofreaders' symbols and handwritten corrections	type the manuscript in unbound form and proofread and correct any errors	at a minimum production rate of 14 words a minute*
5. Given a 15-minute production timing on three-column arranged tables containing words, figures and columnar headings	center and type tables in unruled form and proofread and correct any errors	at a minimum production rate 10 words a minute*
6. Given a 10-minute production timing on invoices	type on printed invoice forms the information as shown and proofread and correct any errors	at a minimum production rate of 10 words a minute*
7. Having completed the production problems in tasks 2–6	identify and correct any errors made on these problems	with a total of no more than 10 undetected errors
8. Given a typing style and English usage test containing 50 objective items previously presented	make a correct response	to at least 35 of the test items within 15 minutes
9. Given a 5-minute production timing on addressing both large and small envelope-sized paper	type the envelopes in acceptable form using a mailing list of addresses containing four lines each and proofread and correct any errors	at a minimum production rate of one envelope a minute*
10. Given a self-check sheet listing desirable work habits for typewriting classroom situations	periodically evaluate the acceptability of your office behavior	by attaining a satisfactory rating on a majority of the criteria listed

*For each uncorrected error, 10 words were deducted from the total words typed; when a carbon copy was required, 15 words were deducted for each uncorrected error.

Learning Guides

Sample learning guides aimed at helping students meet the performance objectives listed in Figure______also were written. These learning guides for the various tasks stress timed practice on problems and proofreading and correcting errors.

Task 1, Straight Copy Material

The student will

1. use the correct techniques in controlling the keyboard (including number keys) and other machine parts, in stroking the keys and in keeping the carriage moving continuously.
2. demonstrate appropriate posture at the typewriter.
3. keep a graph or chart of timed writings, recording speed and accuracy.
4. improve speed and accuracy scores during separate drives.
5. type sentence and paragraph copy guided either by the word count indicated in the copy or by the instructor as he or she calls time intervals.
6. set new goals as the length of timed writings is increased from 1 to 2 to 3 minutes.
7. figure the words a minute and clearly indicate errors on the copy.

Task 2, Business Letters

The student will

1. view transparencies, flannelboard or bulletin board displays and/or chalkboard presentations that illustrate correct placement of letter parts.

2. engage in timed practice on opening and closing lines of a letter.
3. engage in frequent timed practice on letters.
4. develop skill in proofreading material while copy is in the machine.
5. practice making a carbon copy, checking on correct insertion of carbon pack and using paper release to prevent carbon wrinkles.
6. practice correcting errors on original and carbons until quick and neat corrections can be made.
7. type letters which include special features, such as attention and subject lines, carbon copy notations and postscripts.

Task 3, Interoffice Memorandums

The student will

1. study acceptable forms for typing interoffice memorandums.
2. engage in timed practice in typing interoffice memorandums
3. practice typing memorandums requiring carbon copies.
4. practice proofreading and correcting errors on memorandums and carbons.

Task 4, Rough-draft Manuscript

The student will

1. practice typing copy corrected by handwritten notations and by proofreaders' marks.
2. plan and set margins for unbound manuscripts.
3. practice proofreading and correcting errors.
4. practice placing vertically and centering horizontally main and secondary headings.
5. practice typing manuscripts containing subheadings.
6. engage in timed practice in planning and typing manuscripts.

Task 5, Tables

The student will

1. review techniques for operating the tab key or bar by touch.
2. practice determining side margins and tabulation stops for multicolumn tables.
3. practice horizontally centering main and secondary headings.
4. practice determining vertical centering of tables of various lengths.
5. practice centering columnar headings that are wider or narrower than the columns themselves.
6. engage in timed practice on multicolumn tables with columnar headings.

Task 6, Invoices

The student will

1. learn the purpose of an invoice, the business situation in which it is used and the importance of number accuracy.
2. practice typing copy containing words and figures.
3. practice using the tabulating mechanism and variable line spacer to align typed material on printed forms.
4. practice aligning columns of figures.

Task 7, Proofreading and Correction of Errors

The student will

1. practice proofreading before removing paper from machine, using the paper bail as an aid.

2. practice proofreading paying special attention to the accuracy of figures and to the meaning of the typewritten material.
3. practice making acceptable corrections quickly.

Task 8, Typing Style and English Usage

The student will

1. use rules for word division.
2. use correct spacing after punctuation marks.
3. use correct spacing of punctuation marks in relation to quotation marks.
4. use proper placement of special letter lines and notations.
5. use open or mixed punctuation and correct letter styles.
6. use rules for vertical and horizontal centering.
7. use rules for expression of numbers.
8. use rules for capitalization.

Task 9, Envelopes

The student will

1. practice typing address on No. 10 and No. 6 3/4 envelopes first by exact and then by judgment placement.
2. engage in timed practice in typing envelopes.
3. type envelopes with special notations such as attention, personal or confidential.

Task 10, Work Habits

The student will

1. study the checklist of acceptable work habits.
2. incorporate these work habits into classroom actions.
3. use self-evaluation to determine progress.
4. strive for improvement as needed.

Sample

Sixty high schools were randomly selected from a listing of all the senior high schools in the Commonwealth and invited to participate in the project. Forty schools accepted. Copies of the tests which had been prepared (see Chapter Ten) were sent to these schools. Test papers from every Typewriting I student in 37 schools were submitted.

Findings

The performance of the sample population on each of eight tests (Tasks 1-8) included in this project can be summarized as follows:

> Thirty-four percent met or exceeded the stated competency for straight copy; fifty-two percent met or exceeded the competency for letters; nineteen percent met or exceeded the competency for a memorandum with a carbon; thirty-six percent met or exceeded the competency for a manuscript; twenty percent met or exceeded the competency set for a three-column table; eighteen percent met or exceeded the competency for invoices; thirty-eight percent met or exceeded the competency on the objective test of knowledge of typing style and English usage; and thirty-eight percent met or exceeded the proofreading competency.

Conclusions and Recommendations

Students should have several opportunities to demonstrate their full range of typewriting competencies. The results of this study should be considered as only one indicator of the performance for Typewriting I students in Pennsylvania. A more complete picture would emerge if one also considered the overall testing programs of individual schools and, later, the actual typing performance which the students demonstrated in their initial jobs.

The first-year typewriting students in the study performed better in typing business letters than in any other commonly taught skill. More than half of the students in the sample did not meet the standards as identified and defined in the study for the remaining competencies. The data showed that in each area accuracy, not speed, prevented many students from meeting the objective.

Performance was lowest in the typing of the invoices. Many teachers feel that the typing of invoices should not be one of the skills to be developed by first-year typing students. Since all of the other competencies are needed by both non-vocational and vocational typists, this point of view seems reasonable.

Test 7 indicated a lack of skill in proofreading and correcting errors. Some teachers indicated that they required first-year typewriting students only to circle, not to correct errors. The reason given was that eraser crumbs damage the machine and that other correction materials are often not available.

Since students need to proofread and correct errors if any typed work is to be usable, proofreading and correction of errors should receive more attention. Robinson[1] states, "The terminal objective even for first-year typewriting should be high problem production performance with errors neatly erased and corrected."

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[1] Jerry W. Robinson, "Typing Accuracy: Myth or Mystery?" Delta Pi Epsilon Journal, Vol. XIV, No. 2, Feb. 1972, p 26.

CHAPTER TEN

TYPEWRITING I EVALUATION INSTRUMENTS

> The typewriter is a basic writing tool....research findings should be brought to bear on all continuous improvement of instruction.
>
> --Leonard J. West

This chapter includes tests which were constructed to determine students' competency on the performance objectives listed in Chapter Nine. It also includes directions for administering the tests and any needed keys.

Typewriting teachers may wish to use these tests at the end of one year of typewriting instruction. It is suggested by the research team that the tests should not all be given at one time. Each test should be given when the teacher has completed instruction on that phase of typewriting skill.

In administering the tests, students should not be permitted to type during the set-up time that appears in the instructions for each test; however, the students may insert the paper and make any necessary machine adjustments. The students should type the material for each test in the order in which it is given. Students should be provided with the recommended amount of paper for each test. If a student must begin a problem again, he or she can do so on the back of the paper provided for that problem.

The teacher should read the directions for each test to the students and answer any general procedure questions. Avoid answering any questions which relate to the way a test is to be arranged. Students should work independently to determine tabular stops, margins, letter style, vertical and horizontal placement. When administering Tests 2 through 6, remind students before each test that they are responsible for proofreading and correcting errors.

To score Tests 2, 4, 5, and 6, compute total words, subtract 10 for each uncorrected error and divide by the time of the test.

Specific instructions for some of the tests follow:

Test 1, Timed Writing. Record words a minute and errors separately. Use the better of the two timed writings.

Test 2, Letters. Permit students to use any letter style found in textbooks. Accept no punctuation after the salutation and complimentary close or a colon after the salutation and a comma after the complimentary close. Incorrectly divided words should be counted as errors.

Test 3, Interoffice Memorandums. Titles if typed on the same line as the executive's name should be preceded by a comma. Paragraphs may be indented or blocked. Reference initials must be typed. Carbons should be corrected. Compute total words, subtract 15 for an error not corrected on the original and the carbon, divide by the time of the test. (15)

Test 5, Tabulation. Check to see that the tabulation is double-spaced.

Test 6, Invoices. The invoices are to be typed as shown.

Test 1

Five-minute Timed Writing

DIRECTIONS:
You will be given two 5-minute timed writings on the following material. Use double spacing and a 70-space line with a 5-space paragraph indention. Circle your errors when you are finished.

Your ability to use communication devices greatly influences how you get along with your coworkers. Your voice, gestures, words, and message determine the impression you make on the person receiving your message. When you communicate, you should strive to get your message across and to make a good impression. Good business relationships depend on how well the sender and receiver concentrate on the message being conveyed. Too often, the process isn't effective because the message and the system used are in conflict.

We use many methods to communicate each day throughout our lives. Three of the most common are speaking, writing, and using gestures; and each method requires that the voice be pleasant and audible, with varied pitch. The words must be part of the listener's vocabulary. Writing must be legible. When handwriting is used for a business message, the more legible it is, the more attention the reader will direct to the message and the less attention he will direct to the handwriting. When you use gestures to speak, they must be visible and easily understood by the observer. A nod of the head or shrug of the shoulders is worthless when the observer cannot see or interpret the meaning of the gesture.

Test 2
Unarranged Business Letters

DIRECTIONS: You will be given 20 minutes to arrange correctly the following three business letters using an acceptable letter style. Move from one letter to another just as quickly as you can. If you finish all three letters before the 20 minutes have elapsed, begin typing the letters once again. Proofread and correct any errors as you type. Your teacher will now give you 3 minutes to set your margins and tabs and to preview the content for each of the letters.

LETTER A: There are 154 words in the body of this letter.

(Current date) / Ms. Louise Gray, Manager, / Dollar Savings Bank / 1452 Stanwix Street / Pittsburgh, PA 15222 / Dear Ms. Gray / (Paragraph 1) Thank you for making it so easy for me to borrow money from your bank. Before I talked with you on April 5, I was quite worried about the thought of borrowing such a large sum of money for the purchase of my first new car. / (Paragraph 2) As we had discussed previously, it will take three years before my car is completely paid off. It is my understanding that, during this period of time, your bank will hold the title to my car. I also realize that I must carry full liability and collision insurance on my car. Will you please let me know, though, if there are any limits to the amount of insurance which I must carry for each? (Paragraph 3) I am enclosing a self-addressed, stamped envelope for your convenience in replying. I look forward to the pleasure of having further dealings with your bank in the future. ? Sincerely yours / John S. Beilman/ (Your reference initials)

LETTER B: There are 171 words in the body of this letter.

(Current date) / Mr. William Day / Waltman Furniture Mart / 611 Green Street / Chicora, PA 16025 / Dear Mr. Day / (Paragraph 1) I enjoyed talking with you at the diner last Tuesday, April 26. Our conversation about your trip to the furniture show in Dallas was worthwhile and informative. / (Paragraph 2) On Tuesday, you said that you were seriously considering the idea of handling your banking business through Mellon here in Chicora. At that time you asked about the variety of services which we provide to our customers. You seemed especially concerned about finding some means of reducing the number of statements which you now receive. Presently, our bank is in the process of using a much more efficient way of notifying our customers of their account balances. It is designed to combine the balances of your checking, savings, and Master Charge accounts on one statement. / (Paragraph 3) We would certainly appreciate the opportunity, Mr. Day, to serve your banking needs. Please call me at 445-3716 if you have any further questions./ Very truly yours / May Keys, Manager / (Your reference initials)

Test 2: Unarranged Business Letters (Cont.)

LETTER C: There are 115 words in the body of this letter.

(Current date) / Ms. Carolyn Grant, Agent / Baltimore Life Insurance Company / 461 Purdum Boulevard / East Brady, PA 16028 / Dear Ms. Grant / (Paragraph 1) I have an insurance policy with your company, No. 15682. This policy covers flood and wind damage to my cottage which is located on Simpson Avenue, along the river. / (Paragraph 2) Could you tell me what procedure I must follow to present a claim to your company? For example, will it be necessary to complete any claims forms for your company before I have the work completed, or can I simply have the work done and send you the bill? / (Paragraph 3) As the summer season is rapidly approaching, it is imperative that I get this matter taken care of soon. Therefore, I would appreciate your quick response to these questions. / Very truly yours / Mike Anderson / (Your reference initials)

Test 3
Interoffice Memorandums

DIRECTIONS: You will be given 15 minutes to type the following unarranged memorandums on the forms that are provided. Make a carbon copy of each memo and correct any errors on the original and the carbon copy as you type. If you finish both memos before the 15 minutes have elapsed, begin typing the memos once again. You will now be given 2 minutes to make the necessary adjustments before your teacher gives you the signal to type.

MEMORANDUM A

(To) June Evans / Claims Director / (From) James Harpster / Vice President / (Today's Date) / (Subject) Refund on Claim No. 264 / (Paragraph 1) Just today, I received a phone call from Mrs. Jane Thompson. She stated that she traveled on our flight to Tulsa on Friday, April 17. / (Paragraph 2) It seems that there is some confusion as to whether Mrs. Thompson lost one or two pieces of luggage on the trip. She claims that she lost two; however, our records show that only one piece of luggage was checked in when she boarded the plane. Is there any other data you might provide that would be helpful in settling this matter? / (Your reference initials)

MEMORANDUM B

(To) Ms. Jill Colbert / Personnel Manager / (From) Dr. Robert Johnson / (Today's Date) / (Subject) Seminar for Staff Clerks / (Paragraph 1) I have recently talked with all of the other doctors in our unit about the skill level of the staff clerks. There are just too many proofreading and typing errors occurring in this area. / (Paragraph 2) As a result of our meeting, we are suggesting that a seminar be designed to help upgrade the skills of these clerks. Do you have any other ideas? / (Your reference initials)

10/7

Test 4
Unbound Manuscript

DIRECTIONS: Arrange and type the following rough-draft material as a 2-page unbound manuscript. Use a 6-inch line of typing and a 5-space paragraph indention. Correct errors as you type. Time limit is 15 minutes. You will now be given 2 minutes to set your margins and tabs and to preview the content before your instructor gives you the signal to begin.

ACHEIVING THROUGH PERFORMANCE ↓ line 13

Many young people today state as a long-range goal that they wish to be successful in the career they pursue. They are aware that many factors ~~elements~~ will help to determine the amount of Success they will achieve during their career. The virtues discussed in the following five sections are among these many factors.

+#→

HAVE A WINNING ATTITUDE

5 You should always attempt to bring a "winning attitude" to the job each day. Without the proper attitude, it is very unlikely that you will be able to develop your potential full. Your attitude affects your business behavior, your job performance, & your ability to work with and lead others. A "winning" attitude" can be de veloped by doing such things as: Striving for fullmastery on each aspects of your job; volunteering to do that extra assignment that will take you beyond your job: and being committed to your employer.

+#→

Be Ambitious

If you are going to reach your full potential, you must have ambition. Ambition is a virtue that will attract the kinds of attention that makes things happen in a career. You can show that you are ambitious by using your present position to prove to your supervisors that you are a highly skilled person who can assume more responsibilities.

BE CREATIVE

In addition to being skilled in the practical use of knowledge within your field ~~area,~~ you must become skilled in using facts for the first time. You must keep your ears and eyes open to find methods that you can use to make operations more effective and efficient. You should always question each ~~every~~ part of your job to seek ways to improve. Never become satisfied ~~happy~~ with the way something is being done because it is the way it has been done for many years.

BE CURRENT

-# →

Do not let your learning stop when you are graduated from your school. You must continue to grow by learning things new about your present job and your next job; the people you work and live with; the company you~~r~~ work for and the industry to which it belongs; the changes in your field of work. One thing is certain--there will be many changes in the world that will affect your career. The successful person is the one who can foresee the changes and adjust to them.

BE COMPLETE

5 Successful people are ~~always~~ aware that their knowledge of business and their ability to work with and lead people have been very important to their career. You, too, can be successful in your career if you set realistic goals and prepare yourself to meet the challenges along your career path. To do so, you must build upon the basics you take with you to your first job by being ambitious, creative, current, and by having a "winning attitude."

DIRECTIONS: You will be given 10 minutes to type the table below, using both horizontal and vertical centering. Use a full sheet of paper, use double spacing, leave 8 spaces between the columns, and use unruled form. Proofread and correct any errors as you type. You will be given 5 minutes to determine margins and tabs for the table before your teacher gives you the signal to type. If you finish the table before time is called, begin typing it once again.

GEORGE-WASHINGTON COLLEGE

Courses Offered to Freshmen by Percent

Course Title	Department	Percent
English Composition I	Humanities	91
Principles of Accounting	Accounting	45
Shorthand Theory	Secretarial	70
Economics History	Finance	32
General Psychology	Social Sciences	60
Data Processing	Computer Science	44
Retail Selling	Marketing	33
College Mathematics	Mathematics	80
Typewriting Techniques	Secretarial	85
Principles of Sociology	Social Sciences	65
Applied Business Law I	Management	46
U.S. History to 1865	History	35
American National Government	Political Science	20
Marriage and Family	Social Sciences	15
Math of Business/Finance	Secretarial	60
Introduction to Business	Management	33

Test
Invoices

DIRECTIONS: Use the forms provided to type a copy of the two invoices as shown below. Proofread and correct any errors as you type. You will be timed for 10 minutes. You will be given 2 minutes to set your left margin and tabs before you begin to type.

INVOICE

CORAOPOLIS STATIONERY SUPPLIES
507 BEAVER STREET
CORAOPOLIS, PA 15108

TO: Michael Ross Associates
4301 Dutch Road
Aliquippa, PA 15001

DATE: (Current Date)

Quantity	Description	Rate	Amount
12	Reams of 20 # White Bond Typing Paper	5.75	69.00
2	Cartons of 10 Scotch (magic) tape	9.25	18.50
6	785 One-Time Carbon Ribbon	4.00	24.00
12	Boxes of 264 Gem Paper Clips	.39	4.68
5	Boxes of #3 Lead Pencils	2.75	13.75
	Total Amount Due		129.93

INVOICE

CORAOPOLIS STATIONERY SUPPLIES
507 BEAVER STREET
CORAOPOLIS, PA 15108

TO: Tile City Stores
100 Park Ridge Drive
McKeesport, PA 15135

DATE: (Current Date)

Quantity	Description	Rate	Amount
36	F-25 Fine Point Bic Pens	.25	9.00
24	Flare Felt Tip Pens	.39	9.36
4	A-1 12" Rulers	.35	1.40
6	Stenographers Notebooks	.29	1.74
3	365-Day Appointment Calendars (3" x 5")	3.50	10.50
	Total Amount Due		32.00

Test 7
Objective Test
10/11

Indicate the spacing required in each of the following instances. Write 0 (for none), 1, or 2 in the answer blank provided.

1. After a period that ends a sentence. 1. 2
2. After a semicolon within a sentence. 2. 1
3. After a question mark that ends a sentence. 3. 2
4. After a period that ends an abbreviation. 4. 1
5. After a colon that is used within a sentence. 5. 2
6. Between a whole number and a fraction when typing a mixed number. 6. 0 or 1
7. Before and after a dash that is used within a sentence. 7. 0 or 1

One word in each line is divided incorrectly. Identify that word by placing the letter of your choice in the answer blank.

8. a. tele-phone b. de-cide c. ship-ped d. ex-cept 8. c

9. a. inter-views b. ser-vice c. steno-grapher d. prod-uct 9. c

10. a. a-long b. aban-don c. ahead d. re-ceipt 10. a

11. a. fis-cal b. friend-ly c. cen-tral d. smil-ing 11. b

12. a. jump-ing b. busi-ness c. how-ever d. should-n't 12. d

Match the following machine parts in Column A with the letter of the appropriate description in Column B.

Column A

13. d Paper release

14. a Paper bail

15. h Line space regulator

16. g Margin stops

17. f Margin release

18. b Variable line spacer

19. j Paper guide

20. e Tabulator

A. Used to hold the paper firmly against platen.

B. Used for slight vertical changes.

C. Used to disengage ribbon.

D. Used to loosen paper for removing.

E. Used for indenting.

F. Used to unlock margin.

G. Used to provide consistent and equal margins on both sides of the paper.

H. Used for automatic vertical spacing.

I. Used to clear tab stops.

J. Used to determine the point in which the center of the paper will appear.

Indicate whether the following underscored punctuation marks are placed correctly in relation to the quotation marks in these sentences by writing "Yes" or "No" in the answer blank at the right.

21. He stated, "The rules are too difficult to understand." — yes

22. The teacher "shouted;" the scores were too low. — no

23. "You will have to do more than that", Jim told me. — no

24. When did she ask, "May I go with you?" — yes or no

25. Our class has been studying "Western Ho!" — yes

Fill in the blanks--Place the correct answer in the space to the right of each question.

26. When a colon is used after the salutation and a comma is used after a complimentary closing in a business letter, the typist is using ? punctuation style. — mixed

27. When the colon and comma are omitted from the salutation and complimentary closing of a business letter, the typist is using ? punctuation. — open

28. A horizontal inch of pica type has ? spaces. — 10

29. On an 8½x11" sheet of paper, an elite typewriter will print ? horizontal spaces. — 102

30. There are ? vertical lines to an inch on a standard typewriter. — 6

31. When a typewriter is set for double spacing, ? line(s) of space will be left between the typewritten lines. — one

32. The scale reading at the left edge of a sheet of paper is 0; at the right edge it is 88. The horizontal center of the sheet is ?. — 44

33. To center *By Robert L. Grubbs* correctly, backspace ? times. — 9

34. To center 41 lines of single-spaced copy on a full sheet of paper (8½x11"), begin the typing on line ? counting from the top. — 13

35. To center 11 lines of double-spaced copy on a sheet of paper containing 50 lines, you would begin typing on line ?. — 15

36. Column headings in a table should be preceded by ? blank lines. — two

37. To leave a 2½" top margin on a page, you would begin typing on line ?. — 16

Multiple Choice--Place the correct letter in the answer blank.

38. The main body of a manuscript should be typed with (a) single (b) double (c) triple spacing. ___b___

39. Footnotes in a manuscript should be (a) single spaced (b) double spaced (c) triple spaced. ___a___

40. The typist usually uses a (a) 5" (b) 6" (c) 7" line of writing to type a manuscript. ___b___

41. The bottom margin of a manuscript should be (a) less than an inch (b) 1 - 1½" (c) more than 1½". ___b___

42. A business letter that is typed on standard size stationery that contains 168 words in the body of the letter would require a line length of (a) 4 or 4½" (b) 5 or 5½" (c) 6 or 6½". ___b___

43. A business letter that is to be typed on standard size stationery that contains 75 words in the body would require side margins of (a) 2 or 2½" (b) 1½ or 1 3/4" (c) 1 or 1¼". ___a___

44. Numbers at the beginning of a sentence should be (a) typed in words (b) typed in figures (c) either a or b. ___a___

45. If reference initials, enclosure notations, and carbon copy notations all appear in the same business letter, the second notation on the page should be the (a) reference initials (b) carbon copy notation (c) enclosure notation. ___c___

46. If an attention line is used in a letter, (a) it must precede the salutation (b) Gentlemen cannot be used as the salutation (c) it must be typed in all caps. ___a___

47. If the subject line is used in a letter, (a) the salutation must be Gentlemen (b) it may be at the left margin (c) it precedes the salutation. ___b___

48. When the company name is typed in the closing lines of a business letter, it is typed in all capital letters (a) on the first line (b) on the second line (c) on the third line below the complimentary closing. ___b___

49. If a writer's name and title are to be typed in a letter, you should (a) type the title first (b) type the title in all caps (c) type the name first. ___c___

50. Footnotes in a manuscript are identified by (a) asterisks (b) letters (c) numbers. ___c___

NOTE TO TEACHER:

No. 6 Space once between a whole number and a made fraction, no space between a number and a keyboard fraction.

No. 7 If a dash is made with two hyphens, leave no spaces before or after the hyphens. If a dash is made with one hyphen, space once before and after the hyphen.

No. 24 Authorities differ. Some recommend using the question mark inside the quotes and other authorities prefer the question mark after quotes. Of course, authorities agree that both question marks are not used.

Key to Test 2-A 10/14

(letterhead)

Words

June 10, - 3

Ms. Louise Gray, Manager 8
Dollar Savings Bank 12
1452 Stanwix Street 16
Pittsburgh, PA 15222 21

Dear Ms. Gray: 24

Thank you for making it so easy for me to borrow money from your bank. 38
Before I talked with you on April 5, I was quite worried about the 52
thought of borrowing such a large sum of money for the purchase of my 66
first new car. 69

As we had discussed previously, it will take three years before my 83
car is completely paid off. It is my understanding that, during this 97
period of time, your bank will hold the title to my car. I also 110
realize that I must carry full liability and collision insurance on 124
my car. Will you please let me know, though, if there are any limits 138
to the amount of insurance which I must carry for each? 149

I am enclosing a self-addressed, stamped envelope for your convenience 163
in replying. I look forward to the pleasure of having further dealings 178
with your bank in the future. 184

Sincerely yours, 188

John S. Beilamn 191

at 192

Enclosure 194

Test 2-1

10/15

(letterhead)

Words

June 10, 3

Mr. William Day 6
Waltman Furniture Mart 11
611 Green Street 15
Chicora, PA 16025 19

Dear Mr. Day: 22

I enjoyed talking with you at the diner last Tuesday, April 26. Our 36
conversation about your trip to the furniture show in Dallas was worth- 51
while and informative. 56

On Tuesday, you said that you were seriously considering the idea of 70
handling your bank business through Mellon here in Chicora. At 84
that time you asked about the variety of services which we provide to 98
our customers. You seemed especially concerned about finding some 112
means of reducing the number of statements which you now receive. 125
Presently, our bank is in the process of using a much more efficient 139
way of notifying our customers of their account balances. It is 152
designed to combine the balances of your checking, savings, and Master 166
Charge accounts on one statement. 173

We would certainly appreciate the opportunity, Mr. Day, to serve your 187
banking needs. Please call me at 445-3716 if you have any further 201
questions. 203

Very truly yours, 207

May Keys, Manager 211

at 212

Key to Test 2-C

(letterhead)

Words

June 10, 3

Ms. Carolyn Grant, Agent 8
Baltimore Life Insurance Company 15
461 Purdum Boulevard 19
East Brady, PA 16068 24

Dear Ms. Grant: 27

I have an insurance policy with your company, No. 15682. 38
This policy covers flood and wind damage to my cottage 49
which is located on Simpson Avenue, along the river. 60

Could you tell me what procedure I must follow to present 72
a claim to your company? For example, will it be necessary 84
to complete any claims forms for your company before I have 96
the work done and send you the bill? 103

As the summer season is rapidly approaching, it is impera- 115
tive that I get this matter taken care of soon. Therefore, 127
I would appreciate your quick response to these questions. 139

Very truly yours, 143

Mike Anderson 146

at 147

Key to Tests 3-A and 3-B

INTEROFFICE MEMORANDUM

Words

TO: June Evans DATE: June 10, - 5
Claims Director 8

FROM: James Harpster SUBJECT: Refund on Claim No. 264 16
Vice President 19

Just today, I received a phone call from Mrs. Jane Thompson. She stated that 35
she traveled on our flight to Tulsa on Friday, April 17. 46

It seems that there is some confusion as to whether Mrs. Thompson lost one or 62
two pieces of luggage on the trip. She claims that she lost two; however, 77
our records show that only one piece of luggage was checked in when she 92
boarded the plane. Is there any other data you might provide that would be 107
helpful in settling this matter? 114

at 115

INTEROFFICE MEMORANDUM

Words

TO: Ms. Jill Colbert DATE: June 10, - 6
Personnel Manager 9

FROM: Dr. Robert Johnson SUBJECT: Seminar for Staff Clerks 18

I have recently talked with all of the other doctors in our unit about the 33
skill level of the staff clerks. There are just too many proofreading and 48
typing errors occurring in this area. 56

As a result of our meeting, we are suggesting that a seminar be designed to 71
help upgrade the skills of these clerks. Do you have any other ideas? 85

at 86

Key to Test 4

ACHIEVING THROUGH PERFORMANCE

Many young people today state as a long-range goal that they wish to be successful in the career they pursue. They are aware that many factors will help to determine the amount of success they will achieve during their career. The virtues discussed in the following five sections are among these many factors.

HAVE A WINNING ATTITUDE

You should always attempt to bring a "winning attitude" to the job each day. Without the proper attitude, it is very unlikely that you will be able to develop your full potential. Your attitude affects your business behavior, your job performance, and your ability to work with and lead others. A "winning" attitude can be developed by doing such things as: Striving for full mastery on each aspect of your job; volunteering to do that extra assignment that will take you beyond your job; and being committed to your employer.

BE AMBITIOUS

If you are going to reach your full potential, you must have ambition. Ambition is a virtue that will attract the kind of attention that makes things happen in a career. You can show that you are ambitious by using your present position to prove to your supervisors that you are a highly skilled person who can assume more responsibilities.

BE CREATIVE

In addition to being skilled in the practical use of knowledge within your field, you must become skilled in using facts for the first time. You must keep your ears and eyes open to find methods that you can use to make operations more effective and efficient. You should always question each part of your job to seek ways to improve. Never become satisfied with the way something is being done because it is the way it has been done for many years.

BE CURRENT

Do not let your learning stop when you are graduated from your school. You must continue to grow by learning new things about your present job and your next job; the people you work and live with; the company you work for and the industry to which it belongs; the changes in your field of work. One thing is certain--there will be many changes in the world that will affect your career. The successful person is the one who can foresee the changes and adjust to them.

BE COMPLETE

Successful people are aware that their knowledge of business and their ability to work with and lead people have been very important to their career. You, too, can be successful in your career if you set realistic goals and prepare yourself to meet the challenges along your career path. To do so, you must build upon the basics you take with you to your first job by being ambitious, creative, current, and by having a "winning attitude."

Key to Test 6

CORAOPOLIS STATIONERY SUPPLIES INVOICE
507 Beaver Street
Coraopolis, PA 15108

TO: Michael Ross Associates DATE: June 13, - 7
4301 Dutch Road 10
Aliquippa, PA 15001 15

Quantity		Rate	Amount	
12	Reams of 20 # White Bond Typing	5.75	69.00	24
	Paper			25
2	Carbons of 10 Scotch (magic) tape	9.25	18.50	34
6	785 One-Time Carbon Ribbon	4.00	24.00	42
12	Boxes of 264 Gem Paper Clips	.39	4.68	50
5	Boxes of #3 Lead Pencils	2.75	13.75	58
	Total Amount Due		129.93	63

CORAOPOLIS STATIONERY SUPPLIES
507 Beaver Street INVOICE
Coraopolis, PA 15108

TO: Tile City Stores DATE: June 13, - 68
100 Park Ridge Drive 72
McKeesport, PA 15135 77

Quantity		Rate	Amount	
36	F-25 Fine Point Bic Pens	.25	9.00	84
24	Flare Tip Pens	.39	9.36	90
4	A-1 12" Rulers	.35	1.40	95
6	Stenographers Notebooks	.29	1.74	102
3	365-Day Appointment Calendars			108
	(3" x 5")	3.50	10.50	113
	Total Amount Due		32.00	118